



Purdue West Lafayette/Indianapolis
Department of Chemistry
General Chemistry I
CHM (WL) 11510
WL Fall 2026

Course Information

Lecture: In-person, in WTHR 200 (WL) or LE 102 (Indianapolis), two times per week, according to your class schedule. (**CRNs:** 15272, 15265, 15280, 15281, 15260, 31345, 31344.)

Recitation: In-person, various locations in WTHR and BRWN (WL) and SL, IT and ET (Indianapolis). Recitations meet M, T, or W for 50 minutes, according to your class schedule.

Course Description

Credit Hours: 3.00. The foundational general chemistry course for engineering, science, and some agricultural majors. Prior knowledge of chemistry is strongly suggested. Topics covered can include thermochemistry, nuclear chemistry, quantum theory and atomic structure, periodic trends, models in bonding, shapes of molecules, intermolecular forces, organic chemistry, synthetic and biological polymers, and phase changes.

Prerequisites: Undergraduate level, MA 15400, Minimum Grade of D or Undergraduate level, MA 15800, Minimum Grade of D or Undergraduate level, MA 15900, Minimum Grade of D or Undergraduate level, MA 16010, Minimum Grade of D [may be taken concurrently] or Undergraduate level, MA 16100, Minimum Grade of D [may be taken concurrently] or Undergraduate level, MA 16500, Minimum Grade of D [may be taken concurrently] or Undergraduate level, MA 22300, Minimum Grade of D [may be taken concurrently] or Undergraduate level, MA 23100, Minimum Grade of D [may be taken concurrently] or

Undergraduate level, MATH 15400, Minimum Grade of D or Undergraduate level, MATH 15900, Minimum Grade of D or Undergraduate level, MATH 16100, Minimum Grade of D [may be taken concurrently] or Undergraduate level, MATH 16500, Minimum Grade of D [may be taken concurrently] or ALEKS Math Assessment 075 or SATR Math 620 or ACT Math 26

Course Learning Outcomes

By the end of the course, you will be able to:

1. Use theory to understand/predict experimental observations.
2. Demonstrate and understand key concepts and principles in chemistry, including the basic theory involved in chemical bonding, structure, reactions, and thermodynamics.

Enrollment Details

Prerequisites:

For CHM 11510 (lecture): MA 15800 (min. D) **or** pre/coreq MA 161/165/16010 (min. D) **or** ALEKS 075 **or** SATR Math 620 **or** ACT Math 26.

For CHM 11520 (in-person lab) or CHM 11530 (virtual lab): CHM 11510 (min. D or taken concurrently).

It is recommended that students take the lecture (CHM 11510) and the lab (CHM 11520 or 11530) concurrently.

- To enroll in the lab (CHM 11520 or 11530), students must be concurrently registered for the lecture (CHM 11510) or have already completed the lecture.
- Students who drop the lecture (CHM 11510) at any point in the semester are required to *also* drop the lab (CHM 11520 or 11530), if they do not have prior credit for the lecture (CHM 11510).
- Students can take the lecture (CHM 11510) without the lab (CHM 11520 or 11530). Students can remain in the lecture (CHM 11510) if they drop the lab (CHM 11520/11530).

CHM 11510 meets the science requirement of the university's foundational core.

Late Registration

If you register late or experience dropped enrollment, causing you to miss assignments, email CHM11510LEC@purdue.edu no later than **Fri. Sept. 11** (end of Week 3) to request make-up assignments or deadline extensions.

Chemistry Department Deadlines for adding or switching sections

Fri. Aug. 28 (end of Week 1): last day to add CHM 11510 or switch lecture or recitation sections *without* instructor approval*

Fri. Sept. 4 (end of Week 2): last day to add CHM 11510 or switch sections *with* instructor approval*

Fri. Sept. 11 (end of Week 3): last day to switch from another CHM course to CHM 11510 *with* instructor approval*

**Submit request using Scheduling Assistant.*

University Drop Deadlines

Fri. Sept. 4 (end of Week 2): last day to drop (cancel) CHM 11510 via MyPurdue without it appearing on your record. **NOTE: If you drop CHM 11510, you must also drop CHM 11520.**

Tues. Nov. 24: last day to drop (cancel) CHM 11510 with a 'W'*. **NOTE: If you drop CHM 11510, you must also drop CHM 11520.**

**Submit request using Scheduling Assistant.*

Email Communication

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 to CHM11510LEC@purdue.edu. Allow up to two business days (M-F, 8 AM - 5 PM) for a response from your instructor, course coordinator, head TA or TA. In general, we will *not* answer emails after business hours (M-F, 8 AM - 5 PM). Please be patient in awaiting a response.

Always use your purdue.edu email account.

Instructor(s) Contact Information

Name: Dr. Cindy Harwood

Email: charwood@purdue.edu

Office Phone Number: 765 494-7012 (messages checked infrequently; email preferred)

Student Consultation Hours

Office Hours will be posted on Brightspace in the Resources module.

Additional Information

M/F 2:30 and 3:30 sections, 2nd half of semester

Name: Dr. Marcy Towns

Email: mtowns@purdue.edu

Office Phone Number: 765 496-1574 (messages checked infrequently; email preferred)

Student Consultation Hours

Office Hours will be posted on Brightspace in the Resources module.

Additional Information

M/F 2:30 and 3:30 sections, 1st half of semester

Name: Dr. Sridhar Budhi

Email: sbudhi@purdue.edu

Office Phone Number: 765-495-7685 (messages checked infrequently; email preferred)

Student Consultation Hours

Office Hours will be posted on Brightspace in the Resources module.

Additional Information

M/W 12:30 and 1:30 sections

Name: Dr. Jon Rienstra-Kiracofe

Email: jonrk@purdue.edu

Office Phone Number: 765 494-5499 (messages checked infrequently; email preferred)

Student Consultation Hours

Office Hours will be posted on Brightspace in the Resources module.

Additional Information

T/Th 8:30 and 9:30 AM sections (2nd half of semester)

Name: Dr. Gudrun Schmidt

Email: gudrun@purdue.edu

Office Phone Number: 765 496-3341 (messages checked infrequently; email preferred)

Student Consultation Hours

Office Hours will be posted on Brightspace in the Resources module.

Additional Information

T/Th 4:30 PM section

Name: Dr. Garth Simpson

Email: gsimpson@purdue.edu

Office Phone Number: 765 496-3054 (messages checked infrequently; email preferred)

Student Consultation Hours

Office Hours will be posted on Brightspace in the Resources module.

Additional Information

T/Th 8:30 and 9:30 AM sections (1st half of semester)

Course Support Personnel

Course Coordinator: Marybeth Miller, Course Coordinator, BRWN 1144D, mille201@purdue.edu, supervises the teaching assistants, manages administrative aspects of the course, and maintains all the grade records for the course.

Recitation Coordinators: Dorothea (Dori) Illner (dillner@purdue.edu) and Lillian (Lillie) Speight (lspeight@purdue.edu), provide administrative support for recitation and other course components and serve as resources for teaching assistants.

General Chemistry Office, BRWN 1144, genchem@purdue.edu

Melissa Roadruck, Administrative Assistant, BRWN 1144, 765-494-5252,

melissa@purdue.edu

Marlene Miller, Administrative Assistant, BRWN 1144, working remotely in the afternoons,

marlenem@purdue.edu

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

Teaching Philosophy

Chemistry 11510 is the foundational general chemistry course for engineering, science, and some agricultural majors. The stated minimum prerequisite for CHM 11510 is one year of algebra and one year of chemistry. We—the professors, course coordinator, teaching assistants, and administrative assistants—are committed 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 the syllabus to learn about the required materials, lecture and recitation schedule, recommended ways to study, grading, and other course policies and procedures.

At the beginning of the course, you will use several resources to review most of your high

school chemistry, including units, problem solving and significant figures; components of matter; stoichiometry; solution concentration; classes of chemical reactions; and gases and kinetic-molecular theory. Topics covered during the semester will include fundamentals of General Chemistry, thermochemistry, quantum theory and atomic structure, periodic trends, models in bonding, shapes of molecules, intermolecular forces, nuclear chemistry, and liquids, solids, and phase changes. Detailed learning objectives for each unit will be posted on the course Brightspace page.

How to Succeed in this Course

It will take you at least two hours on your own for every hour we spend in class to study and learn the material. This means you will spend about 8-12 hours of distraction-free studying and working with chemistry each week. You may spend this time reviewing and annotating your lecture notes, reading the text, doing homework, working practice problems, studying for exams, or other things. You may find yourself spending *more than* 8-12 hours per week if your math skills need improvement or if it has been a few years since you took a chemistry course. If you are committed to your goals and dreams, then dedicate yourself to spending the necessary time to perform well.

Before Lecture

- Review your notes from the previous lecture.
- Review the assigned reading and read the sample problems within the assigned section of the textbook.

Use the textbook in ways that work best for you.

- Use the textbook as a reference when you study your lecture notes. Fill in any gaps and correct any information.
- Processing technical information will be more effective in the absence of Netflix, TVs, radios, earbuds, etc. Turn your phone on silent and set it aside/across the room.
- With technical material, the subheadings often carry important information. This is different from the chapter headings in a novel that usually contain no information.
- Read technical material (like your Chemistry textbook) differently than you would read a novel. Read in short "chunks" and give yourself time to reflect and interpret the information presented. With technical material, it is often difficult to pick up the "story" in the second paragraph if you did not process the first paragraph.
- Try the problems in the book *without* looking at the solutions! If you have

understood what you have read, then you should be able to solve the problems. First, cover the solution and try the problem. Second, quickly look at the answer to see if you are correct. If your answer is incorrect, try re-reading the section to see if you missed anything. Third, look at your work again to find your mistake. Fourth, look at the solution of the problem presented in the book. **The key is to force yourself to recall and apply material.**

During Lecture

- Turn off distractions (i.e., streaming, HW, social media, etc.).
- Take notes!
- Write down each step of every problem or example even if you do not understand the step. You can always ask about it later.
- Try to answer all the questions and work on all the problems that the professor presents.
- Use shorthand or abbreviations so that you can write quickly, but understandably.
- Write a question mark next to things you do not understand so you can return to them after class.
- Periodically note the time in the margin so that you can quickly find a certain section of the lecture when you review the lecture recording.

After Lecture

- Review your notes while things are still fresh in your mind.
- Listen to the lecture recording to fill in things you missed.
- Attend Instructor or TA office hours or email your TA (allow 24 hours for a response) to ask questions and get help.
- Never miss lecture. Chemistry is cumulative. What is presented tomorrow depends upon your knowledge of what was covered today. If you miss class, then get a friend to take notes for you or take notes from the recording.

When Should I do the Homework?

- Do some work in chemistry every day. Work *at least* two chemistry problems each day. If you are drawing a blank about the problem after 5-10 minutes, go on to another problem. After a day or so, work related problems in the textbook.
- Review your class notes and the assigned pages in the textbook *before* you attempt any of your homework problems and/or have your notes and textbook available while doing homework.
- Seek help from a TA during recitation, office hours or via email (allow 24 hours for a response) or from your instructor during office hours.

Practice, Practice, Practice

- Read the Sample Problems in the textbook, then work one or both Follow-Up Problems and check your work at the end of the chapter.
- Work additional problems at the end of each textbook chapter. You can check answers for the problems with colored numbers in Appendix E.
- Look for similarities and differences in problems (homework questions, lecture examples). Classify problems by the type of knowledge that is needed to solve the problem.

Learning Resources, Technology & Texts

Chemistry: The Molecular Nature of Matter and Change

Authors: Silberberg and Amateis

Publisher: McGraw-Hill

Publication Date: 2026

Edition: Evergreen or 10th edition

Achieve

Publisher: Macmillan

Textbook: The textbook used in CHM 11510 is *Chemistry: The Molecular Nature of Matter and Change*, Evergreen Edition (2026 release) or 10th edition, by Silberberg and Amateis. There are several options available for purchasing a paper and/or electronic version of the book, including purchasing a loose-leaf version with eBook directly from McGraw-Hill for \$72.92 plus tax. You can choose whatever format (print, eBook, etc.) works best for you. See the Required Course Materials module on Brightspace for further information.

Achieve: In CHM 11510, you are required to complete homework online using the Macmillan Achieve program. You can purchase instant access via the link on Brightspace (\$41.99 for 1 term access or \$63.99 for 2 term access) or you can purchase a code from a local bookstore that you can then redeem via the link on Brightspace. **You must register for Achieve using your purdue.edu email address.** Macmillan Customer Service can be reached at 1-800-936-6899 or <https://mhe.my.site.com/macmillanlearning/s/chat-with-us>.

iClicker Cloud You will use the free iClicker Cloud app in lecture. Refer to the **Lecture** module on Brightspace for instructions.

Office 365 You can download the Teams/OneNote programs for free. Go to <https://www.itap.purdue.edu/shopping/software/product/office365.html> and log in using your Purdue account.

Calculator: You may only use a simple, scientific calculator on exams. Calculators that can graph or solve or store equations are *not* allowed. See the [Exam Information](#) module on Brightspace for details.

Sources of Help:

Office hours: Instructors and TAs will hold office hours each week, either in person or online. You may attend the office hours of any TA in this course. Detailed schedules will be posted on Brightspace in the [Resources](#) module.

Supplemental Instruction (SI, www.purdue.edu/SI) is offered for CHM 11510 at PWL. Please visit Brightspace to access information about connecting with SI sessions and SI leader office hours.

Chemistry Resource Room, WTHR 117B, PWL, open to all students,

https://www.chem.purdue.edu/academic_programs/resource-room/index.html.

Academic Success Center - PWL, <https://www.purdue.edu/asc/>; Purdue in Indianapolis, <https://www.purdue.edu/asc/indianapolis/index.html>.

Peer-led tutoring (<https://www.purdue.edu/asc/indianapolis/tutoring.html>) is offered for CHM 11510 at Purdue in Indianapolis. Please visit Brightspace for details.

Private tutors (not free): see list on Brightspace ([Resources](#)).

If we can do anything further to support your access to and engagement with materials, please let us know.

Brightspace learning management system (LMS)

Access the course via Purdue's Brightspace learning management system. It is strongly suggested that you explore and become familiar not only with the site navigation, but also with the content and resources available for this course. See the Student Services widget in Brightspace for Technology Resources, Academic Resources, Campus Resources, and Health and Well-Being Resources.

Assignments

Your achievement of course learning objectives will be assessed through a combination of recitation attendance, lecture attendance, homework, quizzes, worksheet completion and upload, 3 midterm exams, and a final exam spread throughout the academic period. Details on these assignments and exams, including a schedule of due dates and guidelines are posted in Brightspace in the relevant module.

Grading Scale

Per the Purdue University Academic Regulations, the following grades shall be available to be assigned by the instructors and reported when they are called for by the registrar:

A+

A: Highest passing grade.

A-

B+

B

B-

C+

C

C-

D+

D

D-: Lowest passing grade; marginally passing minimal objectives of the course.

E: Conditional failure; failure to achieve minimum objectives, but only to such limited extent that credit can be obtained by examination or otherwise without repeating the entire course. This grade represents failure in the course unless and until the record is duly changed within one semester. It cannot be improved to a grade higher than D. (See section E.) When an instructor reports a grade of E, they shall file in the departmental office a statement of what is required of the student to receive the passing grade.

F: Failure; failure to achieve minimal objectives of the course.

The student must repeat the course satisfactorily in order to establish credit in it.

Grades and Grade Reports

Each of the assigned course activities for CHM 11510 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 (i.e., not included in your final grade calculation):

- your *one* lowest homework score
- your *one* lowest pre-recitation quiz score
- your *one* lowest recitation worksheet upload score
- your *one* lowest exam score or ½ final exam score

The total number of points for CHM 11510 will be distributed as follows:

Item	Pts	Notes
Math Review	5 pts	
Lecture Participation (iClicker)	60 pts	best 20 at 3 pts each
Homework	130 pts	best 13 of 14 assignments at 10 pts each
Pre-Recitation Quiz	40 pts	best 8 of 9 assignments at 5 pts each
Recitation Attendance	50 pts	best 10 at 5 pts each
Recitation Worksheet Completion/Upload	45 pts	best 9 of 10 at 5 pts each
Exams	465 pts	3 at 155 pts each
<u>Final Exam</u>	310 pts	(comprehensive)
Sub-total	1105 pts	
-		
<u>Dropped exam</u>	-155 pts	drop lowest exam score or ½ final exam score, whichever is less
Total	950 pts	
Extra Credit	14 pts	10 pts for answering iClicker questions correctly; 4 pts for completing Goal Setting and Reflection surveys

The total points available for exams is 620. Your exam total will be determined as follows:

Your points earned on the Final Exam will be divided in half and considered as separate scores, T4 and T5, both of which are equal. For example, if you score 186/310 on the final exam, then your scores for T4 and T5 would each be 93/155. These scores will be compared with your scores on Exams 1-3 and the lowest of these scores will be dropped (i.e., not counted into your total points). The remaining 4 scores will comprise your exam total.

Up to 14 points of extra credit will be available for answering iClicker questions in lecture *correctly* and for completing Goal Setting and Reflection surveys).

At the end of the semester, letter grades will be assigned based on the following scale:

A: Total score $\geq 93\%$

A-: $90\% \leq \text{Total Score} < 93\%$

B+: $86\% \leq \text{Total Score} < 90\%$

B: $83\% \leq \text{Total Score} < 86\%$

B-: $80\% \leq \text{Total Score} < 83\%$

C+: $76\% \leq \text{Total Score} < 80\%$

C: $73\% \leq \text{Total Score} < 76\%$

C-: $70\% \leq \text{Total Score} < 73\%$

D+: $66\% \leq \text{Total Score} < 70\%$

D: $63\% \leq \text{Total Score} < 66\%$

D-: $60\% \leq \text{Total Score} < 63\%$

F: Total Score $< 60\%$

Periodically during the semester, your total points will be calculated, and your tentative letter grade to date will be posted so that you can see how well you are doing in the course. You must check all your grades on Brightspace regularly. After each exam, we will announce a deadline for you to inform us of any grade errors or discrepancies. Grade issues that are brought forward after the deadlines may not be considered, depending on the timing and situation.

Course Schedule

The lecture-recitation-exam schedule is posted under Content > Course Information in

both Excel and pdf form.

Who to contact for what concern

What?	Who?
missed lecture	1. There is no need to inform anyone. Attendance at 20 of 26 lectures is counted into your grade (6 lectures are dropped to account for absences and other situations). 2. Access lecture recording and slides on Brightspace (Kaltura Media Gallery), PWL only.
iClicker malfunction	1. If you have a technical issue, contact Purdue IT (see below). 2. If you had a non-technical issue, there is no need to inform anyone. Attendance at 20 of 26 lectures is counted into your grade (6 lectures are dropped to account for absences and other situations).
missed HW or recitation assignment and/or attendance points due to excused absence , i.e., emergency illness (MEAPS), death in the family (GAPS), or military leave (MAPS)	1. Fill out absence request with ODOS https://www.purdue.edu/advocacy/students/absences.html. 2. Request makeup work, deadline extensions or prorated scores at Excused Absence Make-up Work Request.

What?	Who?
missed HW or recitation assignment and/or attendance points due to an unexcused absence	1. There is no need to inform anyone. The lowest score or scores in each grade category is dropped (not included in your total points) to account for unexcused absences. 2. If you believe you have a special circumstance, you may email CHM11510LEC@purdue.edu for consideration.
exam conflict	1. Email CHM11510LEC@purdue.edu at least one calendar week before the exam to see if you are eligible for a rescheduled exam.
missed an exam	1. Email CHM11510LEC@purdue.edu <i>immediately</i> to see if your absence is excused and if you can take a make-up exam.
homework issue	1. If you have a content (chemistry) question, go to TA office hours (schedule on Brightspace) and ask for help. 2. For Achieve technical issues, submit the form at https://mhe.my.site.com/macmillanlearning/s/chat-with-us 3. For other questions, email CHM11510LEC@purdue.edu.
Brightspace issue	Purdue IT (see below)
Authenticator issue	Purdue IT (see below)
Gradescope issue	Purdue IT (see below)

Purdue IT:

- By Phone: 765-494-4000
- By Email: it@purdue.edu

- Hours of Operation: by phone and by email 24 hours a day, 7 days a week.

Purdue IT walk-up Service Desk locations (for in-person help; West Lafayette only):

- HSSE Undergraduate Library (HSSE), main floor of Stewart Center (STEW 135)
- Wilmeth Active Learning Center (WALC), first floor (far side from the elevators)
- See hours at <https://it.purdue.edu/facilities/instructionallabs/resources/currenthours.php>.

Purdue Resources Widget posted on Brightspace Homepage topics include:

- Technology Resources
- Academic Resources
- Campus Resources
- Health and Well-Being Resources

Course Logistics

Weekly Assignments

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

Item	Platform	Day	Time
Homework	Achieve	Wednesdays	due 11:59 PM
Pre-Recitation Quiz	Gradescope	day before recitation (M, T or W)	due 11:59 PM
Upload completed recitation worksheet	Gradescope	day of recitation (T, W or Th)	due 11:59 PM

All assignments will be listed or linked on the course Brightspace page. Refer to details in the relevant sections that follow. Changes will be announced on Brightspace.

Reading Assignments and Learning Objectives

Reading assignments are listed in the course schedule tab and will also be provided in lecture and on Brightspace. Reviewing the assigned material prior to lecture is recommended. Some of the material in the reading assignments will be covered in lecture and some on your own. Learning Objectives list the concepts you are expected to understand and the skills (calculations) you are expected to demonstrate for each topic covered in the course. They are posted in the [Learning Objectives](#) module on Brightspace. Exam questions will be based on the Learning Objectives.

Lectures

Lecture attendance is essential to learn the material presented. However, do not come to lecture if you are sick, have COVID or flu symptoms, or are directed to isolate or quarantine. Lectures at PWL are recorded on Boilercast. Access instructions are provided in the [Lectures](#) module on Brightspace.

Lecture attendance (participation) is recorded through iClicker questions answered during class. You will earn 3 points for each lecture in which you answer a question, with your best 20 scores counting toward your grade. To receive credit, you must attend in person and use a mobile device or laptop (iClicker remotes are not allowed). Instructions for setting up iClicker are available in the [Lectures](#) module on Brightspace. The iClicker mobile app is free through Purdue's site license.

An additional 0.5 point of extra credit will be awarded for each lecture in which you answer the iClicker question *correctly*, up to a maximum of 10 points of extra credit. The extra credit points will be added to your total at the end of the semester.

If slides are used, then student versions of lecture slides may be posted on Brightspace in the [Lectures](#) module. These are outlines of the lectures and are not a substitute for taking notes in lecture.

Cell phones, computers, and other electronic devices *not being used for instruction purposes* are distracting for everyone in a learning situation. Computers can be used to take notes and follow lectures, but please respect your classmates by not using social media, texting, searching the internet, watching Netflix, etc. during class.

Talking aloud to classmates during lectures is distracting to other students and is disrespectful to the lecturer. If you have a question, please ask but otherwise remain quiet and allow the students around you the opportunity to pay attention.

If you have questions, please attend TA or instructor office hours (see the [Resources](#) module on Brightspace for the schedule).

Recitation

Recitation provides the opportunity for you to ask questions and work problems with your fellow students and TA. Refer to the Course Schedule tab for recitation topics. Recitation is cancelled in Weeks 8 and 14.

In most weeks, the recitation topic will be lecture content from the prior week. You should review your lecture notes, reading assignments and homework assignment before attending recitation.

In most weeks, there will be a pre-recitation quiz worth 5 pts on Gradescope. It covers the material that will be practiced in recitation and is due the day *before* your recitation meets at 11:59 PM.

Attendance at recitation is required. However, do not come to recitation if you are sick, have COVID or flu symptoms, or are directed to isolate or quarantine. If you have an *excused absence*, follow the instructions listed in the [Absences](#) module of Brightspace to request a make-up assignment for recitation attendance credit.

Recitation attendance (participation) is worth 5 points per week that recitation meets. The maximum number of points you can earn for recitation attendance is 50 (i.e., participation in 10 of the recitations). You must arrive within the first 10 minutes of class for your attendance to count. Each student is permitted one grace late arrival.

Work on your recitation worksheet during class or finish it later if needed. Submit the

completed worksheet (PDF only) to Gradescope by 11:59 PM on the same day as your recitation (Tuesday, Wednesday, or Thursday). Completed means that you have shown your work for all calculations. Each submission is worth 5 points.

Take your textbook, homework, calculators, and/or any questions you have regarding the course to recitation.

Note that it is not your TA's responsibility to *provide you with answers* to homework 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 (Achieve)

You will have a weekly homework assignment on the Achieve platform, usually due on Wednesdays by 11:59 PM. All links and due dates will be in the **Homework** module on Brightspace.

Each question allows up to five attempts. For every incorrect attempt, the score for that question is reduced by 5% of its value. *Example:* On a 20-question assignment worth 10 points, each question is worth 0.5 points. If you answer a question correctly on the third attempt (after two incorrect tries), you earn 0.45 points for that question. This policy is meant to encourage you to think carefully and do your best on your first try, rather than relying on guessing.

Suggested strategy for solving HW problems:

- Start by trying the problem on your own, referring to your class notes and textbook.
- If you miss it, use the Achieve AI Tutor (see details below) - it's designed to guide your learning without giving away the answer.
- Still stuck? Stop by office hours or check out campus resources like the Chemistry Resource Room for extra help.

Each homework assignment is worth 10 points. The one lowest homework score will be dropped at the end of the semester.

Achieve includes an AI-powered personalized homework tutor that can help you approach and solve homework problems. To read tips or provide feedback about the AI Tutor, click the "Get Tips and Share Feedback" button next to the AI Tutor button in your Achieve assignment. You should always cross-check AI guidance with your own notes, textbook, and Achieve's feedback. Keep in mind that AI can sometimes provide inaccurate or incomplete information.

No time extensions are possible for any homework assignments, except for excused absences. Allow plenty of time to do your homework and get the highest possible score. If you wait until the last minute, you risk the possibility of technical difficulties, illness, or other situations interfering with your success. If you have an *excused absence*, follow the instructions listed in the **Absences** module of Brightspace to request a deadline extension.

Exams are likely to include questions taken from homework assignments. Copies of all HW assignments with unlimited attempts will be available after the due dates for study purposes. HW grades do not synchronize instantaneously with Brightspace. Also, do not be concerned if your grade updates before you finish the assignment. Be patient.

If you have difficulties accessing Achieve, then try the following: (1) only access Achieve through Brightspace; (2) use Chrome; and (3) allow pop-ups.

Macmillan Customer Service can be reached at 1-800-936-6899 or <https://mhe.my.site.com/macmillanlearning/s/chat-with-us>.

Exams

Exams are a chance for you to demonstrate your understanding by answering conceptual questions and to demonstrate your skills by answering calculation questions. We aim for exams to be about half conceptual questions and about half calculation questions. Exams are worth approximately 65% of your final grade. All exam questions relate to one or more of the Learning Objectives posted on Brightspace.

Exams:

- will be on paper,
 - are worth 155 points each,
 - consist of multiple-choice questions, and
 - have a 60-minute time limit (unless you have extended time through the DRC),

Exam dates:

Exam	Date	Time	PWL Location	Purdue in Indianapolis Location
1	Thurs. Sept. 24	8:00 – 9:00 PM	Multiple	LE100, LE101
2	Wed. Oct. 21	8:00 – 9:00 PM	Multiple	LE100, LE101
3	Thurs. Nov. 19	8:00 – 9:00 PM	Multiple	LE100, LE101

► If you have a conflict with another course (either a class or an exam), you *must* contact Marybeth Miller or the General Chemistry office *at least one calendar week* before the exam date to discuss your options. You may be asked to provide written verification of the conflict.

Useful information (formulas, conversion factors, periodic table, etc.) to be provided with the exam will be posted in advance on Brightspace.

You may only use a simple, scientific calculator on exams. Calculators that can graph or solve or store equations are not allowed. See Brightspace ([Exam Information](#) module) for details.

Exam questions will be based on the Learning Objectives.

You will have an assigned location for each of the exams, which will be posted on Brightspace prior to each exam.

Your lowest exam score or $\frac{1}{2}$ your final exam score will be dropped at the end of the semester.

If you have an excused absence and miss an exam, email Marybeth Miller as quickly as possible to arrange a make-up exam. No makeup exams are possible for *unexcused* absences.

Unless there is a direct order to avoid travel, commuter students should plan travel times as appropriate to weather conditions to ensure they allot enough time for their commute. Students who miss an exam due to travel issues (traffic, car troubles, or because they personally feel unsafe driving under conditions, etc.) are considered unexcused, unless a government "avoid travel" order was issued.

After all eligible students have taken the exam, we will post the key on Brightspace. It is important that you review your mistakes and correct misconceptions because chemistry is cumulative, and topics build on previous topics.

You may ask questions about exam content in recitation or in TA office hours.

If you would like to review a past exam with the coordinator or your instructor, you must fill out the "Exam Debrief" form posted on Brightspace in the [Exam Information](#) module and email it to us before requesting a meeting.

Final Exam

The final exam is comprehensive and is worth 310 points. The time, date and format of the final exam will be communicated to you during the semester.

Wait until you know the date of the final exam before you make travel plans that might conflict with the exam. Final exams will NOT be rescheduled to accommodate your travel plans.

University policy on Final Exams states: *"Students scheduled for **more than two** (final) examinations in one calendar day are entitled to reschedule any examination in excess of two. . . . It is the responsibility of the student to make necessary arrangements **before the last week of regularly scheduled classes.**"*

Attendance Policy

This course follows [University Academic Regulations regarding class attendance](#). Only the course instructors (professors) can excuse a student from a course requirement or responsibility. If you are absent, refer to the information below and the [Absences](#) module on Brightspace and act accordingly.

Unless it falls under the University excused absence regulations (see below), any work due should be submitted on time via our course Brightspace.

Unless there is a direct order to avoid travel, commuter students should plan travel times as appropriate to weather conditions to ensure they allot enough time for their commute.

Students who miss an exam due to travel issues (traffic, car troubles, or because they personally feel unsafe driving under conditions, etc.) are considered unexcused, unless a government "avoid travel" order was issued.

Excused Absences

Under academic regulations, excused absences may be granted by ODOS for cases of grief/bereavement, military service, jury duty, parenting leave, or emergent medical care (details below). To request make-up work or deadline extensions (HW, recitation) for *excused* absences, use the appropriate form in the **Absences** module on Brightspace. Student athletes who miss class for NCAA travel should fill out the appropriate form in the **Absences** module on Brightspace to request makeup work. A student athlete must submit their NCAA travel letter to Marybeth Miller to be eligible for makeup work. For absences due to academic or professional development activities, contact Marybeth Miller at least one week prior to the absence for consideration and fill out the appropriate form in the **Absences** module on Brightspace. Documentation of the activity must be provided. Make-up assignments or deadline extensions may or may not be provided, depending on the nature of the activity (according to the judgement of the instructors).

Unexcused Absences

To account for *unexcused* absences (illnesses, trips, conflicts, or other situations), the lowest score in each grade category (recitation, HW, exam) is automatically dropped at the end of the semester. Lowest scores are also dropped to account for internet or related technology issues that may have prevented you from completing a quiz or homework. No other make-up work or deadline extensions (i.e., for recitation, quizzes, HW, or exams) are possible for *unexcused* absences.

Absence accommodations

Absence accommodations, such as modified attendance, approved by the **Disability Resource Center** will be handled individually. Contact the General Chemistry office (genchem@purdue.edu) for more information.

Grief Absence Policy for Students (GAPS)

If you experience the death of a family member or close friend, fill out the form at <https://www.purdue.edu/advocacy/students/absences.html>. Scores for any missed assignments covered under a verified GAPS absence can be pro-rated (assigned a score based on your average grade for that type of assignment at the end of the semester) or you can make up the work. Refer to the **Absences** module on Brightspace for more information or alternatives.

Military Absence Policy for Students (MAPS)

If you are required to complete mandatory military training, fill out the form at <https://www.purdue.edu/advocacy/students/absences.html>. Scores for any missed assignments covered under a verified MAPS absence can be pro-rated (assigned a score based on your average grade for that type of assignment at the end of the semester) or you can make up the work. Refer to the **Absences** module on Brightspace for more information or alternatives.

Medical Excused Absence Policy for Students (MEAPS)

Students may occasionally have to miss class and other academic obligations due to hospitalization or emergency department visits. This policy is intended for **emergent care only (note that urgent care visits are no longer included in this policy)**. **Emergent medical issues are those that pose a threat to loss of life or limb** (e.g., serious burns, seizures, severe cuts requiring stitches, broken/dislocated limbs or joints, head injuries). The Office of the Dean of Students will not provide notes to instructors for primary care medical appointments or routine care (e.g., overall wellness, dental care, general behavioral health care) nor occasional symptoms (e.g., pink eye, colds, flu).

Academic Integrity

Purdue's Honor 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/odos/osrr/honor-pledge/about.html>

Academic Integrity

All students are expected to be familiar with Purdue's policies on academic integrity <https://www.purdue.edu/odos/osrr/academic-integrity/index.php>

"Dishonesty in connection with any University activity may result in informal action or disciplinary sanctions. Cheating, plagiarism, or knowingly furnishing false information to the University are examples of dishonesty. The commitment of acts of cheating, lying, stealing, and deceit in any of their diverse forms (such as the use of ghost-written papers, the use of substitutes for taking examinations, the use of illegal cribs, plagiarism, and copying during examinations) is dishonest and must not be tolerated. Moreover, knowingly to aid and abet, directly or indirectly, other parties in committing dishonest acts is in itself dishonest." *From University Senate Document 72-18.*

In CHM 11510, academic integrity means "doing your own work" at all times. Discussion of chemical concepts is encouraged but sharing your answers and work on social media for the *express purpose* of allowing other students to copy it is not acceptable. Such a use of technology does not help you learn the material and is considered academic dishonesty.

All collaboration with others (such as Group Me, Zoom, discussion boards, websites, text, in-person, TA office hours, etc.) during recitation quizzes is prohibited.

Using online resources such as Course Hero or Chegg to gain answers to any graded assignment (including homework, quizzes, and exams) is *not* allowed. Posting course materials to websites is a violation of copyright laws and is *not* allowed. The CHM 11510 instructors can obtain user information from Chegg and other sites when inappropriate course material is posted. This information will be investigated.

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.

This course packet is a contract between CHM 11510 students and instructors. If a student violates the contract by committing an act of academic dishonesty, the instructor reserves the right to alter the terms of the contract (including grading policies) at his/her discretion.

Students who observe an issue of academic integrity can report it to the Office of the Dean of Students (<https://www.purdue.edu/odos/> - use the General Incident Report to report anonymously), call 765-494-8778 or email integrity@purdue.edu.

AI Policy

Artificial intelligence (AI) and large language models (LLMs) such as ChatGPT, Gemini, Claude, etc., can assist with explanations, suggestions, and brainstorming ideas. Used correctly, these tools can support your learning — but they are a supplement to your own creativity, critical thinking, and judgment, not a replacement for them. AI does not reliably distinguish fact from fiction, and the information it provides can be inaccurate or incomplete.

Authorized AI Usage by Students in CHM 11510:

In CHM 11510, you are encouraged to use AI to:

- Generate additional study questions and problems,
- Create “quizlets,”
- Assist with editing and proofreading your written work,
- Generate and explore examples of specific chemistry concepts to deepen your understanding,
- Use the AI Tutor tool within Achieve.

Prohibited AI Usage by Students in CHM 11510:

You may not:

- Use AI tools to obtain answers for graded assignments, including recitation worksheets, quizzes, and homework problems
- Copy, paste, or submit AI-generated content as your own original work
- Upload, copy/paste, or screenshot any instructor-created materials — including lecture slides, quiz questions, or homework problems from Achieve — into any AI platform

Violating the above is considered cheating and/or plagiarism under Purdue's academic integrity policy.

Why the upload restriction? When course materials are entered into a generative AI tool the prompts and data may be retained and become part of that tool's training data. To protect your own data privacy and the intellectual property associated with this course, never upload instructor-generated content or proprietary homework datasets (from Achieve) into any AI platform.

Disclosure

Disclosure is expected for AI-assisted work that contributes directly to a graded submission such as a recitation worksheet. When AI is used for an authorized purpose, such as proofreading or checking your work, please include a short disclosure statement with your submission (i.e., on your recitation worksheet) identifying (1) which AI tool was used, and (2) how it was used (e.g., "I used ChatGPT to proofread my submission; the submitted work is my own"). Note that minor uses (e.g., asking AI to clarify a concept) does *not* require disclosure.

Accommodations

Disability Accommodations

Purdue University strives to make learning experiences accessible to all participants. If you anticipate or experience physical or academic barriers based on disability, you are encouraged to contact the Disability Resource Center at: drc@purdue.edu or by phone: 765-494-1247, as soon as possible.

If the Disability Resource Center (DRC) has determined reasonable accommodations that you would like to utilize in this class, you must send your Course Accommodation Letter.

Instructions on sharing your Course Accommodation Letter can be found by visiting: <https://www.purdue.edu/drc/students/course-accommodation-letter.php>.

Additionally, you are strongly encouraged to contact course instructors as soon as possible to discuss implementation of your accommodations.

Students are responsible for releasing their Course Accommodation Letter (CAL) to their course instructors as early as possible. Accommodations are not retroactive and generally cannot be applied to coursework, exams, or other academic requirements that occurred before the CAL was released. Sufficient advance notice may be necessary to arrange and implement certain accommodations.

Testing Accommodations

Students who have approved testing accommodations and intend to use them in this course will complete accommodated exams through Purdue Testing Services (PTS). Students are responsible for following PTS procedures and submitting exam requests by the published scheduling deadlines, including for final exams when applicable. Additional information regarding PTS timelines and procedures can be found on their website: <https://www.purdue.edu/studentsuccess/testing-services/accommodated-testing/student.php>

Students should monitor their Purdue email and respond promptly to communications related to accommodated exam scheduling. Requests submitted after the published deadline are considered late, and implementation of testing accommodations for that assessment cannot be guaranteed. Late requests will be reviewed individually, but students should be prepared to complete the assessment without their approved testing accommodations if there is insufficient time or capacity to implement them. Approved accommodations remain in place for future assessments when scheduling requirements are met.

For CHM 11510, communications regarding accommodated exam scheduling will come from Melissa Roadruck at melissa@purdue.edu. Students should follow the instructions provided in those communications regarding scheduling through PTS.

Accessibility

Every member of our course should be able to access, use, and learn from the materials we share. This includes all course related digital content that you and I share in the

course. This approach helps promote equal access for everyone at Purdue and is mandated federally by [Title II of the Americans with Disabilities Act \(ADA\)](#). We will work together to provide this access within our Brightspace course.

- My part, as the instructor, is to make sure all course materials shared to Brightspace, such as documents, slides, videos and audio, and images, meet accessibility guidelines and to assist you in making sure anything you share is accessible. If we can do anything further to support your access to and engagement with course materials, please notify me.
- Your role, as a student, is to make sure anything you post for other students to engage with is also accessible, such as peer grading, peer feedback, and discussion board posts. This expectation is built into all course assignments that require you to post to Brightspace.
- A good starting place for students and instructors is to bookmark and review the [Innovative Learning Accessibility Checklist](#) for guidance on creating accessible materials. We need to work together to make sure all materials on our course Brightspace are accessible.
- If you select materials to share on our Brightspace from Purdue Libraries catalog or databases, best practices include choosing items that:
 - Can be downloaded in full
 - Are available in EPUB or HTML formats
 - Include alternative text for written materials or captions for audio/visual content

Nondiscrimination Statement

Purdue University is committed to maintaining a community that 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 potential. A hyperlink to Purdue's full Nondiscrimination Policy Statement is included in the Academic Resources table on your Brightspace homepage.

Mental Health/Wellness Statement

If you find yourself beginning to feel some stress, anxiety and/or feeling slightly overwhelmed, try [Therapy Assistance Online \(TAO\)](#), a web and app-based mental health resource available courtesy of Purdue Counseling and Psychological Services (CAPS). TAO is available to all students at any time by creating an account on the [TAO Connect](#) website, or downloading the app from the App Store or Google Play. It offers free, confidential well-being resources through a self-guided program informed by psychotherapy research and strategies that may aid in overcoming anxiety, depression and other concerns. It provides accessible and effective resources including short videos,

brief exercises, and self-reflection tools.

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 a.m.-5 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 in West Lafayette 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 free and can be done on BoilerConnect. Students in Indianapolis will find support services curated on the [Vice Provost for Student Life](#) website.

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 offices in [West Lafayette](#) or [Indianapolis](#).

Emergency Preparedness

In the event of a major campus emergency, course requirements, 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 this course will be posted onto the course website or can be obtained by contacting the instructors or TAs via email or phone. You are expected to read your @purdue.edu email on a frequent basis.

See [Purdue's Information on Emergency Preparation and Planning](#). This website covers topics such as Severe Weather Guidance, Emergency Plans, and a place to sign up for the Emergency Warning Notification System. I encourage you to download and review the [Emergency Procedures Guide](#).

Emergency Preparedness plan for WTHR 200:

- If we hear a fire alarm, exit the building and gather at **The Lion Fountain outside Stanley Coulter Hall or inside Stewart Center (STEW)** if there is inclement weather.
- In the event of a tornado warning, shelter in place in WTHR 200.

- In the event of an active threat such as a shooting, we will shelter in place in WTHR 200, lock the doors and turn off the lights.

Emergency Preparedness plan for LE102:

- If we hear a fire alarm, exit the building.
- In the event of a tornado warning, move to a lower interior room away from windows.
- In the event of an active threat such as a shooting, we will shelter in place in LE 102.

Student-Related Policies

The Vice President for Ethics & Compliance website includes a list of [Student Policies](#). Among those is the [Violent Behavior](#) policy, which explains that Purdue is committed to providing a safe and secure campus environment for members of the university community. Purdue strives to create an educational environment for students and a work environment for employees that promote educational and career goals. Violent behavior impedes such goals. Therefore, violent behavior is prohibited in or on any University facility or while participating in any university activity.

Grade Appeals Process

At the end of the course, after final course grades have been assigned, students who believe their grade was assigned contrary to what is outlined in the course syllabus, has been assigned arbitrarily, or has been reduced too severely due to a violation of course academic integrity policies, may submit an appeal request to have this final course grade reviewed. The University's Grade Appeal Process is outlined in the University Catalog and is also referenced on the website for the [Office of Student Rights and Responsibilities \(OSRR\)](#).

Staff in the OSRR office are able to assist in determining if a Grade Appeal is appropriate. Generally, students should not expect a grade appeal to be successful if there is a lack of information to support the appeal or if the student merely thinks that the assigned grade is "unfair". Students must also attempt to resolve the matter informally with the course instructor prior to beginning the appeal process.

Basic Needs Program

If you are facing challenges securing basic needs such as food, housing, transportation,

health services, or access to technology or childcare resources and believe this may affect your performance in the course, please contact the Office of the Dean of Students (ODOS) to help coordinate with community resources. These services vary by location. In West Lafayette, see the [Basic Needs Program](#) website, or email basicneeds@purdue.edu. To connect with a Student Support Generalist on the Indianapolis campus, contact them by phone at 765-495-7797 or email studentlifeindy@purdue.edu.

Course Evaluation

Toward the end of this semester, you will be provided with an opportunity to give feedback on this course and your instructor. Purdue uses an online course evaluation system, and I will not have access to this anonymous feedback until after final grades are submitted. You will receive an official email from evaluation administrators with a link to the online evaluation site and will receive a prompt to complete the survey when you login to Brightspace. The subject line will be: Please take 2-5 minutes to complete the survey. Check your "Junk E-mail" folder occasionally to be sure the evaluation emails were not accidentally routed there. Your participation is an integral part of this course, and your feedback is vital to improving education at Purdue University. I strongly urge you to participate in the evaluation system.

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.