## CHM 11520 Course Packet Fall 2025

**Course Information: General Chemistry I Laboratory.** Credit Hours: 1.00. The foundational general chemistry laboratory course for engineering, science, and some agricultural majors. Prior knowledge of chemistry is strongly suggested.

Instructor: Dr. Jeanine Conklin, jaconkli@purdue.edu CRN: 15951-16274 (check MyPurdue for exact CRN)

Laboratory: In-person, Chaney-Hale Hall of Science (CHAS)

Labs meet Tues-Fri. for 2 hours, 50 minutes, according to your class schedule.

**Prerequisites:** 

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

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.

It is recommended that students take the lecture (CHM 11510) and the lab (CHM 11520/11530) concurrently. Taking the lab (CHM 11520/11530) by itself is not permitted unless the student has prior credit for the lecture (CHM 11510).

#### **Enrollment Details:**

- Students can take the lecture (CHM 11510) without the lab (CHM 11520/11530).
- To enroll in the lab (CHM 11520/11530), 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 11520/11530), if they do not have prior credit for the lecture (CHM 11510).
- Students can stay in the lecture (CHM 11510) if they drop the lab (CHM 11520/11530).

► Late Registration: If you register late or experience dropped enrollment, notify Dr. Conklin no later than Fri. Sept. 12 to request make-up assignments or deadline extensions.

CHEMISTRY DEPARTMENT DEADLINES FOR ADDING OR SWITCHING SECTIONS

**Fri. Aug. 29 (end of Week 1):** last day to add CHM 11520 or switch sections *without* instructor approval

Fri. Sept. 12 (end of Week 3): last day to add CHM 11520 with instructor approval\*

#### **UNIVERSITY DROP DEADLINES**

Fri. Sept. 5 (end of Week 2): last day to drop (cancel) CHM 11520 via MyPurdue without it appearing on your record. NOTE: If you drop CHM 11510, you must also drop CHM 11520.

Tues. Nov. 25: last day to drop (cancel) CHM 11520 with a 'W'\*. NOTE: If you drop CHM 11510, you must also drop CHM 11520.

<sup>\*</sup>Submit request using Scheduling Assistant.

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## **Course Personnel and Communication**

**Course Coordinator:** Dr. Conklin supervises the teaching assistants, manages administrative aspects of the course, and maintains all the grade records for the course.

## General Chemistry Office, BRWN 1144, <a href="mailto:genchem@purdue.edu">genchem@purdue.edu</a>

Marlene Miller (<u>marlenem@purdue.edu</u>), Administrative Assistant, partially working remotely Melissa Roadruck (<u>melissa@purdue.edu</u>), Administrative Assistant, BRWN 1144, 765-494-5252. The General Chemistry Office handles all the administrative details associated with the course. Direct all non-chemistry questions about the course to this office.

**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 <a href="mailto:CHM11520help@purdue.edu">CHM11520help@purdue.edu</a>. 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.

### **Course Description:**

Chemistry 11520 is a foundational general chemistry laboratory course for engineering, science, and some agricultural majors. Topics studied include lab safety, measurement, thermodynamics, quantitative analysis, stoichiometry, and chromatography.

## **Learning Outcomes:**

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

- 1. Understand how scientific equipment and analog and/or digital instruments are used to obtain data measurements.
- 2. Understand safe laboratory practices and proper chemical hygiene methods associated with an experiment.
- 3. Develop observational skills during experiments to collect quality data and articulate observations in their laboratory reports.
- 4. Maintain ethical and trustworthy recordkeeping and reporting methods: recording data precisely, deciding on when a data set is kept or discarded for the experiments performed.
- 5. Analyze experimentally obtained data by using calculations and mathematical analysis techniques, such as graphical analysis of data sets.
- 6. Interpret experimental data and analyze this data using scientific models, concepts, representations, and equations.
- 7. Use evidenced-based reasoning to make claims and critique results. Make connections between lab results and the theories/concepts learned in lecture.
- 8. Use safe practices, proper chemical hygiene, and standard protocols while in a laboratory.
- 9. Collect and record digital data sets using modern data collection techniques including wireless data collection and cloud-based data storage.
- 10. Work with a partner(s) to accomplish laboratory work.

11. Experience chemistry in-person through direct use of chemicals, laboratory equipment, and instrumentation to complete a laboratory experiment.

The course has been designed and structured so that in addition to the treatment of the concepts and topics listed above, there is a simultaneous emphasis on development of problem-solving skills. Laboratory experiments are scheduled weekly and offer an opportunity to reinforce and extend what is discussed in lecture (CHM 11510), explore new topics, and to develop your knowledge of chemistry laboratory skills.

The Chemistry 11520 team—the instructor, teaching assistants, administrative assistants, and preparations lab staff—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 on to learn about the required materials, recommended ways to prepare, grading, and other course policies and procedures.

#### **Foundational Core:**

CHM 11520 meets the science requirement of the university's foundational core.

#### **Overview of CHM 11520 Activities and Policies**

#### **Learning Management System**

Brightspace (<a href="https://purdue.brightspace.com/d2l/login">https://purdue.brightspace.com/d2l/login</a>) is the primary course management site for the course. Assignments, announcements, PreLab videos, grades, and other course information will be posted on Brightspace.

#### Weekly Assignments

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

Item	Platform	Day	Time
Pre-Lab Quiz	Labflow	Day before your lab day	Due by 11:59 PM
Post-Lab Report	Labflow	Day of your lab day	Due by 11:59 PM

All assignments will be listed on Labflow, the link for Labflow is on Brightspace. Changes will be announced on Brightspace.

#### **Laboratory Assignments**

You will access digital lab materials (instructions/manual) via the Labflow program. You will take pre-lab quizzes on Labflow. Instructions for Labflow purchase and registration are in the *Labflow* module on Brightspace.

## **Laboratory Attendance and Participation**

Lab attendance is required since CHM 11520 is a laboratory course. Students with *excused* absences are eligible to complete lab make-up assignments. Students with *unexcused* absences are eligible for *one* lab make-up assignment, per student, per semester, provided the student applies for a make-up assignment *before* the lab start time. Refer to the instructions listed in the

**Absences** module of Brightspace to request a lab make-up assignment. Students can complete no more than four lab make-up assignments per semester for excused absences or disability accommodations. To account for *all other absences* (i.e., unexcused), the one lowest lab score is dropped at the end of the semester, i.e., 10 of 11 lab scores are included in your final grade.

In the cases below, a zero score (failure to complete) will be assigned:

- being absent for any reason (except excused grief, jury duty, medical, or military absences or NCAA travel or approved professional development)
- being dismissed from lab for an incomplete Safety Certification (score <20/25)</li>
- being dismissed from lab for safety violations, including dress and goggle violations. If you go home to change clothes, you must be back within the first 10 minutes of the lab period. If someone brings you clothes, it must be within the first 10 minutes of the lab period.
- · arriving more than 10 minutes after the lab start time (including if you go home to change clothes)
- · leaving lab early or otherwise not completing the lab project
- · inadequate preparation that hinders lab participation
- · not contributing constructively to the group's work in lab, including leaving the laboratory for longer-than-necessary periods of time/personal breaks
- · not recording appropriate data and/or observations during lab
- · failure to submit a lab report, even if you attended the lab

**Minimum lab completion:** You are required to complete 9 of the 11 lab experiments and reports. If you complete 8 of the 11 lab experiments and reports, then your final letter grade will be reduced by one full letter grade. If you complete 7 or fewer of the 11 lab experiments and reports, then you will receive a failing grade for the course. Attending lab but not completing the lab report is considered a failure to complete.

#### 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. It is your responsibility to know the policies. You may or may not receive a warning before being dismissed from lab for safety violations.

- All students must complete the online safety certification with a score of at least 20/25 by Mon. Sep. 8 at 11:59 PM to participate in the Lab 1 during Week 3. If you fail to complete the safety certification, it will reopen on Fri. Sep. 12 at 6 PM and will be due the following Monday at 11:59 PM.
- You will be sent home and will receive a zero for *each* lab you miss due to an incomplete safety certification.
- Goggles (indirectly vented) are always required in the laboratory, including during clean
  up, report-writing, and lab check-out. If you are in lab and your goggles are not covering
  your eyes, you will be sent home and will receive a zero for the lab and the lab report

(failure to complete). When lab is over and you remove your goggles, you must walk out of the lab *immediately*. In other words, you must put everything away, pack-up, and chat with classmates *before* removing your goggles.

- Wear gloves when specified by the lab instructions or by your instructor.
- 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.
- Food and beverages, including water bottles, are not allowed in the labs.
- 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 and shoes) is required. Your clothing must cover you from your neck (collarbone) to your ankles when sitting, standing, or reaching. Your feet must be completely covered by your shoes (see image below). Your TA or lab supervisor might ask you to raise your arms or bend your knees to check if your attire violates the dress code.

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

**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
- loose-knit sweaters that expose your skin
- pants that are ripped or have holes in the fabric of any size
- tights or leggings
- Capri or cropped pants
- skinny or ankle pants that reveal skin between the shoe and the bottom of the pant leg
- shorts
- short skirts (i.e. shorter than floor length)
- open-toed and/or open-heeled shoes (including Crocs, Birkenstocks, Ugg slippers 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 and ankle, with *or* without socks

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

Your best option for chemistry lab attire is a crew neck t-shirt, jeans without holes, and sneakers with socks that cover your ankles. Please see the image below.

## Proper Lab Attire



## **Pre-Lab Quizzes**

- The purpose of the pre-lab quizzes on Labflow is to ensure that you have adequately prepared for the lab by reviewing the procedure, concepts, and calculations.
- For the best chance of success, take the pre-lab quiz after reading the lab materials on Labflow.
- Prelab quizzes are individual assignments. Collaboration with other students or assistance from TAs during the quiz is not allowed. (However, you are allowed to access the lab materials.)
- Pre-lab quizzes are due each week in which lab meets on the day before your lab by 11:59 PM.
- If you do not attempt the quiz before the deadline, you will receive a zero for the quiz (out of 16 points). However, you ARE allowed to attend the lab and can still earn points for the lab report (20 points).
- There are no make-up quizzes or time extensions except for excused absences or approved
  accommodations. The lowest prelab quiz score is dropped at the end of the semester to
  account for illnesses, technical difficulties, and other absences that are not excused.

#### **Lab Procedures**

- Each lab will have a procedure assignment in the PreLab, which includes the following components:
  - Purpose of the lab
  - Equipment and Reagent list

- Diagram of the experiment (all parts) with amounts, times and parts labeled
- Safety and waste information
- Proper lab manual citation

#### **Lab Reports**

- For each lab, you are eligible to earn 2 points for attendance. To earn these points, you must remain in lab until you have completed (submitted) your report or until the end of the lab period, whichever comes first. If you leave lab before your report is completed (submitted) or before the end of the lab period, you will get a zero for attendance (0/2 pts).
- For each lab project, you will complete an *individual* lab report in Labflow. You have 2 attempts for each lab report. To access your second attempt, click "Attempt Activity Again" at the bottom of the screen. All submissions will be analyzed by the Turnitin plagiarism checker. If your similarity score for any answer(s) is/are too high, then rewrite and resubmit.
- You are encouraged to refer to lab materials and notes while completing the reports. Also, you may discuss your report with peers and your TA, however *you must do your own work* (i.e., you should not copy or submit another student's answers).
- Lab reports are due by 11:59 PM on the day that you have lab. Check all your work carefully before the deadline to make sure you answered all the questions. Late lab reports are not accepted.
- Complete the lab report appropriately:
  - All text in your report, except for calculations, must be typed, not handwritten.
  - Answer in full sentences for open-ended questions. Answer all parts of the questions.
  - Each student must prepare individual graphs and tables, not take screenshots or photograph other students' work. Label graphs and tables clearly.
  - Show calculation steps clearly for mathematical questions. Make sure your handwriting is clear and legible. If your TA cannot read your work, then they cannot grade it.
  - Show the use of correct units and significant figures for your measurements and calculation results.
  - Ensure results and conclusions are consistent with your data and observations.
  - o Answer questions using your own words, i.e., using distinct language.
  - Cite the lab manual if you are quoting directly from it or put information from the lab manual into your own words.
- The use of ChatGPT or other AI agents is not permitted in the course and the use of AI will be considered academic dishonesty.

### Lab Grades

• Graded lab reports will be available for viewing approximately one week after submission. You are encouraged to review the graded work as your TA may have left useful feedback for your future improvement. If you have questions about a lab grade, speak with your TA or Dr. Conklin within one week of the graded report being made available to you. After this point, grade adjustments or changes may not be possible.

- To have a lab report regraded, after you have already discussed the issue with your TA, and it is still unresolved:
  - Send a detailed and specific explanation of why you are requesting a regrade via email <u>CHM11520Help@purdue.edu</u>. Refer to the specific question(s) with which you have an issue. "I deserve more points" alone is not an acceptable explanation.
  - The lab supervisors will conduct the regrade based on the original rubric. In some cases, your TA will be consulted.
  - o If a grade is changed, we will update the score in Labflow and/or Brightspace.
  - o Regrade requests will only be accepted for one week after the lab report has been graded.
  - The whole lab report will be regraded and it is possible to get a lower score upon regrade.

#### Lab Equipment

You will share an assigned laboratory drawer of equipment with the student(s) in your row. Your lab partner(s) will depend upon your commitment to keeping the equipment clean and in good working condition.

• You and your lab partner(s) will have the opportunity to assess the equipment during check-in day. Any equipment that is unusable i.e., dirty, chipped, cracked, stained, broken, etc., is replaced free during check-in.

### After check-in day:

- It is important that you do your part to maintain the drawer throughout the semester by cleaning all the glassware after use by (1) washing with hot water, soap, and a brush, (2) rinsing with tap water, (3) and then rinsing with deionized water. By using this for cleaning glassware, you will have better experimental results. Make sure to return clean glassware to your drawer.
- If you are responsible for a piece of equipment becoming unusable 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 your row and in the lost and found box in the lab. 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 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; the storeroom staff can split the cost of a replacement among the lab partners.

**Leaving the Course**: If you drop your laboratory course after having checked into a lab drawer, it is your responsibility to check out of your assigned drawer during your scheduled lab period. Contact your TA and/or the storeroom on the 1<sup>st</sup> or 4<sup>th</sup> floor of CHAS for instructions. **Failure to check out of lab will result in a \$45 fee**, and forfeiture of the right to determine the acceptability of all drawer equipment.

## Checkout day:

- On the last day of laboratory, you and your lab partners will checkout of your lab drawer. You must arrive on time, properly dressed and wear goggles. If you arrive more than 15 minutes late, you will be asked to leave the lab and will be assessed a fee of \$45, plus the cost of replacing any equipment that is broken, missing or dirty.
- You and your lab partners will clean and inventory the drawer for your TAs' inspection. All missing or unusable equipment must be replaced at that time.
- If you do not attend lab check-out, you will be assessed a fee of \$45, plus the cost of replacing any equipment that is broken, missing or dirty.

#### **Required Materials**

**Textbook**: The textbook used in CHM 11520 is *Chemistry: The Molecular Nature of Matter and Change*, 10<sup>th</sup> 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 \$59.13 plus tax. See Brightspace for further information.

Achieve: In CHM 11510, you are required to complete homework online using the Macmillan Achieve program. In CHM 11520, we will use Achieve in Week 1 only. 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 <a href="https://mhe.my.site.com/macmillanlearning/s/chat-with-us">https://mhe.my.site.com/macmillanlearning/s/chat-with-us</a>.

**Office 365** You can download the Teams/OneNote programs for free. Go to https://it.purdue.edu/services/microsoft-office-365.php and log in using your Purdue account.

**Calculator:** You may use a simple, scientific calculator or the one included on the iPads in lab. See CHM 11510 Brightspace (*Exam Information*) for details.

#### **How to Prepare for CHM 11520**

It will take you at least two hours on your own for every hour you spend interacting with the course in order to study and learn the material. This means you will spend about 6-10 hours of distraction-free studying and working with chemistry lab each week. You may spend this time reviewing and annotating your lab manual, reading the text, doing PreLab assignments, preparing a procedure, answering Lab questions, or other things. You may find yourself spending *more than* 6-10 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.

## Resources (Sources of Help)

Course resources are linked in the *Resources* module on Brightspace and are listed below.

- Office hours: The instructor and TAs will hold office hours each week. You may attend the
  office hours of any TA in this course. Detailed schedules will be posted on Brightspace in
  the *Resources* module.
- Chemistry Resource Room, WTHR 117B
- COSINE Tutoring Program (College of Science), see
   <a href="https://www.purdue.edu/science/Current\_Students/cosine/index.html">https://www.purdue.edu/science/Current\_Students/cosine/index.html</a> for schedule.
- Academic Success Center, <a href="https://www.purdue.edu/asc/">https://www.purdue.edu/asc/</a>.
- Private tutors (not free): see list on Brightspace (*Resources*).

## **Reading Assignments and Learning Objectives**

- Reading assignments are listed at the end of this packet and will also be provided on Brightspace. Reviewing the assigned material prior to the laboratory is recommended. Some of the material will be covered in the CHM 11510 lecture and some on your own.
- Learning Objectives lists the concepts you are expected to understand and the skills (calculations) you are expected to demonstrate for each topic covered in the course. Quiz questions will be based on the Learning Objectives for each lab.

## **Determining Your Course Grade**

Each of the assigned course activities for CHM 11520 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 one lowest pre-lab quiz score
- · your *one* lowest lab report score

The total number of points for CHM 11520 will be distributed as follows:

Week 1 Assignments	10 pts	(not dropped)
Week 2 Assignment	5 pts	(not dropped)
Prelab Quizzes	160 pts	(best 10 of 11 at 16 pts each)
Lab Reports	200 pts	(best 10 of 11 at 20 pts each)
Sub-total	375 pts	

At the end of the session, the total scores for all students will be arranged in numerical order, the score that corresponds to the  $99^{th}$  percentile ( $S_{99}$ ) will be determined, and then letter grades will be assigned based on this percentile score as follows:

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A:
            Total Score \geq 0.93 x S_{99}
A-:
            0.90 \times S_{99} \le \text{Total Score} < 0.93 \times S_{99}
            0.86 \times S_{99} \leq \text{Total Score} < 0.90 \times S_{99}
B+:
B:
            0.83 \times S_{99} \le \text{Total Score} < 0.86 \times S_{99}
B-:
            0.80 \times S_{99} \le \text{Total Score} < 0.83 \times S_{99}
C+:
            0.76 \times S_{99} \le \text{Total Score} < 0.80 \times S_{99}
C:
            0.73 \times S_{99} \le \text{Total Score} < 0.76 \times S_{99}
            0.70 \times S_{99} \le \text{Total Score} < 0.73 \times S_{99}
C-:
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D+:  $0.66 \times S_{99} \le \text{Total Score} < 0.70 \times S_{99}$ D:  $0.63 \times S_{99} \le \text{Total Score} < 0.66 \times S_{99}$ D-:  $0.60 \times S_{99} \le \text{Total Score} < 0.63 \times S_{99}$ 

F: Total Score  $< 0.60 \times S_{99}$ 

This system has several advantages:

- Unlike a curved scale, it encourages cooperation among students because NO student is penalized when another is successful.
- Unlike an absolute scale, it tends to neutralize the effects of differences from one semester to another and thereby ensures that the same criteria are used to assign grades from one semester to another.

This approach to grading means that the grade you get in this course depends primarily on *your* own effort and performance. It also ensures that all students who do well in the course will get good grades.

- 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. Grade issues that are brought forward after the deadlines may not be considered, depending on the timing and situation.

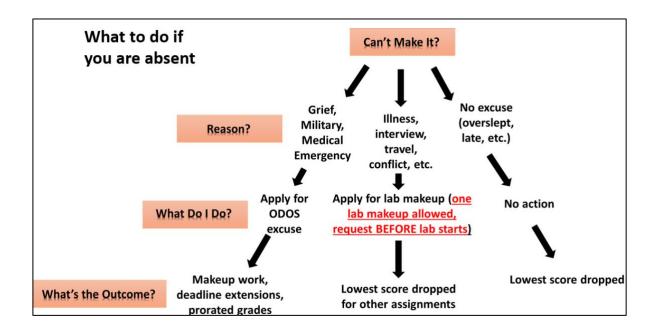
**Minimum lab completion:** You are required to complete 9 of the 11 lab experiments and reports. If you complete 8 of the 11 lab experiments and reports, then your final letter grade will be reduced by one full letter grade. If you complete 7 or fewer of the 11 lab experiments and reports, then you will receive a failing grade for the course. Attending lab but not completing the lab report is considered a failure to complete.

### **University and Course Policies**

Details of the following policies are listed under the Purdue Resources Widget posted on Brightspace Homepage. Topics there include: Technology Resources, Academic Resources, Campus Resources, Health and Well-Being Resources. There are numerous links to Purdue University Resources such as: Academic Success Center, Academic Policies and Regulations, Time-Management Tools, the Disability Resource Center, Purdue Libraries, Purdue OWL, the Dean of Students, the Advising Center, Center for Career Opportunities, Well-Being Resources, Counseling Services, Purdue University Student Health, and more.

#### **Attendance and Absences**

This course follows the <u>University Academic Regulations</u> regarding class attendance which states that students are expected to be present for every meeting of the class in which they are enrolled. Only the instructor 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.



#### **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 or urgent care medical care (details below). To request make-up work or deadline extensions for *excused* absences, use the forms called "Excused Absence Lab Make-up Request" and "Excused Absence: Request Deadline Extensions" in the Absences module on Brightspace.

Student athletes who miss class for NCAA travel should fill out the form called "Excused Absence Lab Make-up Request" in the Absences module on Brightspace to receive the lab make-up assignment. A student athlete must submit their NCAA travel letter to Dr. Conklin to be eligible for a lab make-up assignment.

For absences due to academic or professional development activities should contact Dr. Conklin at least one week prior to the absence for consideration and fill out the form called "Excused Absence Lab Make-up Request" 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 (prelab quiz, lab report) is automatically dropped at the end of the semester. This includes internet or related technology issues that may have prevented you from completing a lab report or prelab quiz. **Students with unexcused absences are eligible for one lab make-up assignment, per student, per semester**, provided the student applies for a make-up assignment *before* the lab start time. Use the form called "Unexcused Absence Lab Make-Up Request" in the Absences module on Brightspace to request a make-up lab. No other make-up work or deadline extensions (i.e., for prelab) 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 (<a href="mailto:genchem@purdue.edu">genchem@purdue.edu</a>) 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 <a href="https://www.purdue.edu/advocacy/students/absences.html">https://www.purdue.edu/advocacy/students/absences.html</a>. 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 <a href="https://www.purdue.edu/advocacy/students/absences.html">https://www.purdue.edu/advocacy/students/absences.html</a>. 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).

A student who has experienced a medical emergency as described above should complete the Medical Excused Absence Request Form

(<a href="https://www.purdue.edu/advocacy/students/absences.html">https://www.purdue.edu/advocacy/students/absences.html</a>) as soon as possible to request that an absence notification be sent to instructors. You will be given the opportunity to make up the work missed due to a medical excused absence. Refer to the *Absences* module on Brightspace for more information on requesting make-up work or deadline extensions.

If your illness is not a medical emergency, then your missed work will be handled either by the one make-up lab policy or the dropped score policy. For special consideration, contact Dr. Conklin, <a href="mailto:jaconkli@purdue.edu">jaconkli@purdue.edu</a>. For privacy reasons, we are prohibited from accepting medical documentation, so do not include it.

#### Mental Health

We care about your mental health. If you or someone you know is feeling overwhelmed, depressed, anxious, and/or in need of mental health support, please talk with your instructor, your

TA, one of the head TAs, Dr. Conklin, your advisor or other trusted person, or seek help from one of the resources below.

- If you find yourself struggling with stress, anxiety and/or starting to feel overwhelmed, try TAO (<a href="https://us.taoconnect.org/register">https://us.taoconnect.org/register</a>). Sign in with your Purdue login and find effective resources 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 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 a.m.-5 p.m. Monday through Friday. Students may submit requests for emergency assistance from the Critical Needs Fund (https://www.purdue.edu/odos/resources/critical-need-fund.html).

## **Diversity Statement** (https://www.purdue.edu/home/ea eou statement/)

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 welcome individuals of all ages, backgrounds, citizenships, countries of origin, disabilities, education, ethnicities, family status, genders, military experiences, political views, races, religions, sexual orientations, socioeconomic status, and work experiences. If you have concerns or feel you have been subject to discrimination, please contact one of the head TAs or Dr. Conklin so we can direct you to appropriate resources.

## Nondiscrimination Statement (https://www.purdue.edu/home/ea eou 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. 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 of ideas, and enriches campus life. A

hyperlink to Purdue's full Nondiscrimination Policy Statement is included in our course Brightspace under University Policies.

### Accessibility

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: <a href="mailto:drc@purdue.edu">drc@purdue.edu</a> 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 my class, you must send me your Course Accommodation Letter. Instructions on sharing your Course Accommodation Letter can be found by visiting: <a href="https://www.purdue.edu/drc/students/course-accommodation-letter.php">https://www.purdue.edu/drc/students/course-accommodation-letter.php</a> Additionally, you are strongly encouraged to contact me as soon as possible to discuss implementation of your accommodations.

Share your "Notification of Course Accommodations" for ALL sections of the course with the CHM 11520 instructors via the AIM system at least one week before an assessment or assignment for which accommodations are desired. We may require an in-person or virtual meeting to discuss certain accommodations. Implementation of accommodations may not be possible if insufficient notification is given.

You should also consider contacting the DRC if you have a chronic illness which will cause you to miss or be late to lab.

## **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 CHM 11520 will be posted on Brightspace and shared via announcements and email. You are expected to read your Purdue email on a frequent basis.

## **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." <a href="https://www.purdue.edu/odos/osrr/honor-pledge/about.html">https://www.purdue.edu/odos/osrr/honor-pledge/about.html</a>

#### **Academic Integrity**

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

"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 11520, 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.

Online quizzes in CHM 11520 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 Course Hero or Chegg to gain answers to any graded assignment is *not* allowed. Posting course materials to websites is a violation of copyright laws and is *not* allowed. The CHM 11520 instructors can obtain user information from Chegg and other sites when inappropriate course material is posted. This information will be investigated.

The use of ChatGPT or other AI agents is not allowed in the class because many of the chemical "facts" that are generated are inaccurate. Students should preferably use 1. The course lab manuals, 2. The textbook, and properly cite all sources use.

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 11520 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 (<a href="https://www.purdue.edu/odos/">https://www.purdue.edu/odos/</a> - use the General Incident Report to report anonymously), call 765-494-8778 or email integrity@purdue.edu.

## Who to contact for what concern:

What?	Who?
will miss lab due to illness (non-emergency) or other reason	Request one "free" make-up lab <b>BEFORE</b> your lab start time at <a href="https://forms.office.com/r/1M7zgfhi25">https://forms.office.com/r/1M7zgfhi25</a> .
missed lab with <b>no excuse</b> (overslept, late, etc.), didn't request "free" make-up lab before lab start time, or already used the one "free" make-up lab	<ol> <li>There is no need to inform anyone.</li> <li>Your one lowest lab score is dropped at the end of the semester to account for situations like these.</li> </ol>
missed lab due to excused absence, e.g., emergency illness (MEAPS), death in the family (GAPS), or military leave (MAPS), or preapproved professional development	<ol> <li>Fill out absence request with ODOS         <ul> <li>https://www.purdue.edu/advocacy/students/absences.html.</li> </ul> </li> <li>Request make-up lab for excused absence at         <ul> <li>https://forms.office.com/r/1M7zgfhi25.</li> </ul> </li> <li>For professional development, make sure to upload your         documentation when filling out the form in step 2.</li> </ol>
lab grading concern	<ol> <li>Discuss with your TA</li> <li>If unresolved, email <a href="mailto:CHM11520help@purdue.edu">CHM11520help@purdue.edu</a>.</li> </ol>
Brightspace issue	Purdue IT (see below)
DuoKey issue	1. Purdue IT (see below)

#### Purdue IT:

By Phone: 765-494-4000By Email: <u>it@purdue.edu</u>

• 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 and Purdue Duo tokens):

- Hicks Undergraduate Library (HIKS), main floor near the Libraries Desk
- HSSE Undergraduate Library (HSSE), main floor of Stewart Center near the printers
- Wilmeth Active Learning Center (WALC), first and second floors
- 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 Schedule & Assignments**

**Disclaimer:** This syllabus/course packet is subject to change. Students will be notified of any changes via Announcements on Brightspace and/or email.

Week#	Week of	Lab Name	Reading	PreLab Quiz Due 11:59 PM	Report Due 11:59 PM
1	8/25	Course Introduction; Math Skills Assessment on Achieve; Lab Safety Assignment; Week 1 Problem Solving	Ch. 1-5		*day of your lab
2	9/1	Check In; iPad orientation; Group Member Agreement; How do we Observe, Record, Communicate Experimental Information?	Ch. 24		*day of your lab
3	9/8	Lab 1: Introduction to Measurement Techniques in the Lab	Ch. 24, 7	day before your lab	day of your lab
4	9/15	Lab 2: How Can We Use a Physical Property to Develop a Separation Method?	Ch. 7	day before your lab	day of your lab
5	9/22	Lab 3: How Can We Produce a Salt from an Element?	pp.304-5; 4.1; Ch. 8	day before your lab	day of your lab
6	9/29	Lab 4: How Can Absorption of Light Be Used to Determine Concentration of a Compound in Solution?	Ch. 8, 6	day before your lab	day of your lab
7	10/6	Lab 5: Which Cereal Contains the Most Iron?	Ch. 6, 9	day before your lab	day of your lab
8	10/13	Fall Break- No Lab			
9	10/20	Lab 6: What Variables Affect the Heat of a Reaction?	Ch. 10	day before your lab	day of your lab
10	10/27	Lab 7: How Does Molecular Shape Affect Polarity?	Ch. 10, 11.12, 15.12	day before your lab	day of your lab
11	11/3	Lab 8: Do You See the Light?	pp 513-7, Ch. 15.5	day before your lab	day of your lab
12	11/10	Lab 9: What Are Synthetic and Biological Polymers?	pp 378-9, Ch. 13.1, 15.6	day before your lab	day of your lab
13	11/17	Lab 10: How Can We Use Chromatography to Separate Plant Pigments?	p 426, Ch. 12.6	day before your lab	day of your lab
14	11/24	Thanksgiving Break- No Lab			
15	12/1	Lab 11: What Are the Molecular Interactions of Washing?	Ch. 12.7, pp278-9	day before your lab	day of your lab
16	12/8	Check Out			
Finals	12/15	No Final Exam			

<sup>\*</sup>Weeks 1 and 2 assignments are not Lab Reports, and do not count in that grade category