CHM 11530 Course Syllabus Summer 2026

Instructor:
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Course Description

Chemistry 11530 is a virtual laboratory class to accompany CHM 11510. Topics covered can include safety, measurement, thermodynamics, quantitative analysis, stoichiometry, molecular geometry, and chromatography. 1.000 Credit hours. Not recommended for BME majors or students who are taking pre-med or related pre-professional health classes.

Course Learning Objectives:

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. Making connections between lab results and the theories/concepts learned in lecture.

Course Structure and Technology:

Brightspace and Gradescope: Place for your grades and a copy of the syllabus. E-mail announcements to the class come via Brightspace. Pre-lab lecture recordings are posted on Brightspace. Lab manual and report forms are on Brightspace. Links to Gradescope are also on Brightspace.

Microsoft Teams: Office hours will be conducted via Teams.

Please note that all required technologies, including access to a stable internet connection during all class activities, are your responsibility as the student. *All times in this syllabus and further mentioned throughout this course are in Eastern Standard Time (Purdue's time zone).*

Required Materials

Digital Materials Charge: Students enrolled in CHM 11530 must purchase digital materials for lab ($20). The materials will be released online on a real-time (approximately weekly) basis during the Summer 2026 semester. You will purchase access to the digital materials via a Purdue University Online link (http://www.eventreg.purdue.edu/online/CHMSummer20). Payment is due by June 23, 2026.

Microsoft Word, Excel, Teams: You can download the Microsoft Word, Excel, and Teams programs for free. Go to portal.office.com and log in using your Purdue account to install the free Office 365 Suite software onto your personal computer, which includes Microsoft Teams. Teams is also available for your phone or iPad via your device's app store.

Optional Textbook: The textbook used in CHM 11510: *Chemistry: The Molecular Nature of Matter and Change*, 10th edition, by Silberberg and Amateis.

Teaching Assistants:

Faith McCauley (Head TA)	fmccaule@purdue.edu
Kristine Maxwell	maxwel44@purdue.edu
Grace Pearson	gpearson@purdue.edu

TAs will grade your lab reports. TAs will also provide office hours.

Office hours:

Name	Email	Day and Time (Eastern Time Zone)	Mode (via Teams)
Kristine Maxwell	maxwel44@purdue.edu	Wednesdays, 10-11 am	Online
Grace Pearson	gpearson@purdue.edu	Tuesdays, 11-12 am	Online
Faith McCauley	fmccaule@purdue.edu	Fridays, 9-10 am	Online
Dr. R-K	jrienstr@purdue.edu	Thursdays, 12-1 pm	Online

Instructional Modality:

CHM 11530 is done completely online. You will complete approximately two labs per week. You may not work ahead. Pre-lab lectures will be recorded and presented in in Brightspace. Office hours will be held via Microsoft Teams.

The Digital Lab Manual is on Brightspace. Labs are released on a weekly basis. Students complete lab reports on their device (laptop and/or tablet) and upload the lab reports in a digital format to Gradescope. There are several virtual simulations you will use. These simulations run best on a laptop or desktop computer using the Chrome browser.

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

Absences and failure to submit lab reports

Students with *excused* absences (ODOS approved grief, jury duty, medical, or military absences) are eligible for a lab extension or to have the lab excused depending on circumstance.

Students with *unexcused* absences are not eligible for an extension. Failure to submit a lab report due to an unexcused absence will result in a zero grade.

If you complete 9 of the 12 lab experiments and reports, then your final letter grade will be reduced by one full letter grade. If you complete 8 or fewer of the 12 lab experiments and reports, then you will receive a failing grade for the course.

However, to account for *all other absences* (i.e., unexcused), the one lowest lab score is dropped at the end of the semester, i.e., 11 of 12 lab scores are included in your final grade.

Lab Safety

- All students must complete the online safety certification (found on Brightspace) with a score of at least 20/25 by the end of Week 2. If you fail to complete the safety certification, it will reopen for one additional week.
- Students who fail to complete the lab Safety Certification (score <20/25), will fail the course.
- The Lab Safety Certification score is not counted toward your grade.

Pre-Lab/Post-Lab Quizzes, Exams: There are no pre-lab, post-lab, quizzes/exams in this course.

Lab Reports

- Each lab report is worth 10 pts.
- 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).
- Simulations used in this class produce unique answers. You may not copy or otherwise use data from another person in class.
- In some cases, "selected area" screenshots are required. Learn how to do a screenshot on a Mac (cmd-cntrl-shift-4) or on a PC (Windows key + Shift + S) or the "snipping tool".
- In some cases, you will be required to include photos in your report. Crop photos so that their file size is small.
- Lab reports are due by 11:59 PM on the day that they are due. Late lab reports are not accepted.
- Do not wait until the last minute to submit your lab report, in case technical difficulties occur. Many of the lab reports in this class may take 3 or more hours to complete.
- Extensions are not given for failure to submit lab due to your computer crashing or battery dying or internet outage. Extensions are also not given if you are traveling, etc. It is your responsibility to have the needed computer, software, and internet access. Start your lab soon after it is posted and made available to give yourself plenty of time to overcome technical or access issues.
- Complete the lab report appropriately:
    - All text in your report, except for calculations, must be typed, or legibly handwritten. If your TA cannot read your work, then they cannot grade it.

- Answer in full sentences for open-ended questions. Answer all parts of the questions.
- Each student must prepare individual graphs and tables, you may *not* take screenshots or photograph other students' work. Label graphs and tables clearly.
- 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.
- Answer questions using your own words, i.e., using distinct language.
- Cite the lab manual or your textbook if you are quoting directly from it or put information from the lab manual into your own words.

Use of AI

Using ChatGPT, Bard, and other AI-based platforms to generate answers is not allowed in this course.

Grade

- Graded lab reports are the only component of your grade.
- 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, **you may request a regrade of *specific problems* through Gradescope *within 4 days* of the graded report being made available to you**. After this point, grade adjustments or changes may not be possible.
- Each lab report is worth 10 points.
- The total number of points for CHM 11530 will be distributed as follows:

  Lab Reports..... 110 pts..... (best 11 of 12 at 10 pts each)

- Your letter grade is determining by a percentage of points out of 110 (rounded to the nearest 0.1%)
- Grading Scale (% out of 110 total pts):

93.0% - 100%	A
90.0% - 92.9%	A-
86.0% - 89.9%	B+
83.0% - 85.9%	B
80.0% - 82.9%	B-
76.0% - 79.9%	C+
73.0% - 75.9%	C
70.0% - 72.9%	C-
66.0% - 69.9%	D+
63.0% - 65.9%	D
60.0% - 62.9%	D-
Below 60%	F

UNIVERSITY AND COURSE POLICIES

Details of the following policies are listed under the Student Resources widget module on the CHM 11530 Brightspace page and includes direct links to student resources for Technology, Academic, Campus, and Health and Well-Being.

The ***Health and Well Being*** module contains links and information about Mental Health, Wellness, and Basic Needs Security, Engaging in Your Learning, Web Accessibility, and Brightspace Accessibility Standards.

UNIVERSITY DROP DEADLINES See: https://catalog.purdue.edu/preview_program.php?catoid=18&poid=33639

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).

A student experiencing a medical emergency as described above should complete the Medical Excused Absence Request Form (https://www.purdue.edu/advocacy/students/absences.html) 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 othe dropped score policy. For special consideration, contact Dr. R-K. For privacy reasons, we are prohibited from accepting medical documentation, so please 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, the course coordinator (Dr. R-K), 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 (https://us.taoconnect.org/register). 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).

Nondiscrimination

This course follows the Purdue Nondiscrimination Policy Statement

Disability Accommodations

If you require accommodations to access course activities or materials, the accommodations must be described and approved by the Disability Resource Center: 765-494-1247www.purdue.edu/drc. To implement accommodations, you must follow the instructions provided by the Disability Resource Center.

Emergencies

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 11530 will be posted on Brightspace and shared via announcements and email.

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/provost/teachinglearning/honor-pledge.html

Academic Integrity

All students are expected to be familiar with Purdue's policies on academic integrity (https://www.purdue.edu/odos/academic-integrity/).

"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 11530, 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 letting other students copy it is not acceptable. Such a use of technology does not help you learn the material and is considered academic dishonesty.

Using online resources such as Chegg to gain answers is *not* allowed. Posting course materials to websites is a violation of copyright laws and is *not* allowed. The CHM 11530 instructors can obtain user information from Chegg and other sites when inappropriate course material is posted. This information will be investigated.

Artificial Intelligence (AI), Large Language Models (LLM), or similar generative technologies are not needed to complete this course. The use of these technologies to generate answers (written or math-based) is prohibited and considered academic dishonesty for this course.

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. All 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 syllabus is a contract between CHM 11530 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.

Course Schedule		
Release Date (always at 12:01 am, Eastern time)	**Lab Topic**	**Lab Due Date (always at 11:59 pm, Eastern Time)**
Monday, June 15	**No lab – Watch your email for instructions on accessing the class during the summer.**	---
Thursday, June 18	Lab 0: Intro Lab and Lab Safety	Sunday, June 21
Monday, June 22	Lab 1: A Physical Property as a Separation	Wednesday, June 24
Thursday, June 25	Lab 2: What Variables Affect Heat of Reaction?	Sunday, June 28
Monday, June 29	Lab 3: Determining a Molecular Formula	Wednesday, July 1
Thursday, July 2	**No lab – 4th of July holiday weekend**	---
Monday, July 6	Lab 4: Do You See the Light?	Wednesday, July 8
Thursday, July 9	Lab 5: Using Light to Determine Concentration	Sunday, July 12
Monday, July 13	Lab 6: You Put Iron in my Cereal?	Wednesday, July 15
Thursday, July 16	Lab 7: Producing a Salt from an Element	Sunday, July 19
Monday, July 20	Lab 8: Molecular Shape and Polarity	Wednesday, July 22
Thursday, July 23	Lab 9: Separating Compounds in Plants	Sunday, July 26
Monday, July 27	Lab 10: Synthetic and Molecular Polymers	Wednesday, July 26
Thursday, July 30	Lab 11: Molecular Interactions of Washing	Sunday, August 2
August 3-7	**No lab – Class ends**	---

Note: This syllabus and schedule are subject to change.
You are expected to read your Purdue email on a frequent basis