PURDUE UNIVERSITY | Chemistry COLLEGE OF SCIENCE

CHEMISTRY 12600: Introduction to Chemistry II

Spring 2026

CRN: 14072

Course Information:

- Students are expected to attend all scheduled lectures, one recitation, and one laboratory each week:
    - Lecture meets MWF, 8:30-9:20 a.m. in WTHR 172
    - Laboratory meets on Thursdays
    - Recitation meets on Tuesdays

Instructor:

Dr. Hannah Starr
Office: WTHR 157
Phone: 765-496-2691
Email: starrh@purdue.edu
Office Hours (in WTHR 151): Mondays 11:30 am – 12:20 pm & Wednesdays 9:30 – 10:20 am

Dr. Starr is also available to meet by appointment to discuss study strategies, concerns, grades, or anything else besides content. Please reach out to Dr. Starr early in the semester if you have concerns about your performance in the course. If you wait until the end of the course, there will not be time to change the course trajectory.

Teaching Assistants:		**Office Hours (WTHR 151)**
Catalina Botero Carrizosa	sboteroc@purdue.edu	Tuesday, 9:30am
Jayna Enguita	jenguita@purdue.edu	Tuesday, 1:30pm
Evie Renninger	erennin@purdue.edu	Friday, 10:30am
Lydia Stone	stone153@purdue.edu	Friday, 9:30am
Vivian de Toledo Krainer	vdetoled@purdue.edu	Friday, 3:30pm

Course Catalog Description:

CHM 12600 - Introduction to Chemistry II Credit Hours: 5.00. A continuation of CHM 12500. Properties of solutions; chemical equilibrium calculations; elementary thermodynamics; oxidation-reduction reactions and electrochemical cells; rates of reaction; qualitative analysis; descriptive chemistry. Typically offered Spring.

Prerequisites

Undergraduate level CHM 12500 Minimum Grade of D; or Undergraduate level CHM 13500 Minimum Grade of D; or Undergraduate level CHM 11500 Minimum Grade of D; or (Undergraduate level CHEM C1050 Minimum Grade of D and Undergraduate level CHEM C1250 Minimum Grade of D)

Required Course Materials

- *Interactive General Chemistry 2.0, Atoms First*, by Macmillan Learning. This text is the same as used in CHM 12500.
- You are required to complete homework assignments online using the Achieve system by MacMillan.
    - Purchase Options:
        - Single Term Access – Digital Only
        - Single Term Access – Digital with Loose Leaf Textbook
        - Two Term Access – If you purchased a two-term access option for CHM 12500 your access will work for CHM 12600

    CHEM 12600 Achieve Purchase instructions:

    1. Go to purdue.brightspace.com and login with your Purdue credentials
    2. Select our course: Spring 2026 CHM 12600-SC1 LEC
    3. Select: Content/Achieve Homework/Macmillan Course Tools Launch and follow the instructions thereafter to gain access to Achieve and the E-Book. ***Be sure to register for Achieve using your Purdue e-mail address!***

    If you purchased two-term access in the fall and want to apply your remaining access to your spring course:

    ● Click the Achieve link in Brightspace. You will see a prompt asking if you'd like to apply your remaining access to the new term's course. Check the box and click "Apply Remaining Achieve Access."

If you want to purchase one-term access:

● Click the Achieve link in Brightspace. You will be prompted with three options. Select the "Purchase Access" button and follow the steps to check out from the student store. *****You must use the same email you use within Brightspace on the Student Store.*****

If you purchased an access code from the bookstore:

● Click the Achieve link in Brightspace. You will be prompted with three options. In the box below the ALREADY HAVE A CODE? option, type your bookstore code exactly as it appears on your access card. You will be granted full access to the course.

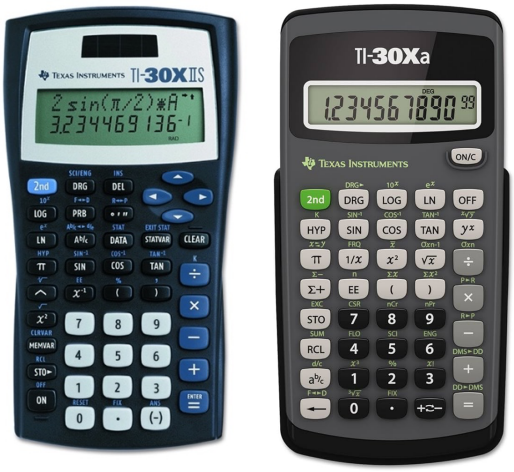
If you want to start a grace period (free two weeks of access to the course):

● Click the Achieve link in Brightspace. You will be prompted with three options. Select "Start a Grace Period," check the acknowledgement box, and create an Achieve account in the student store. You will see a yellow banner at the top of your course that will count down the days remaining in your grace period.

******You must use the same email you use within Brightspace on the Student Store.******

If you have any difficulty registering, please contact Macmillan Support here.

- Scientific Calculator. There are two acceptable calculators for the course. No graphing calculators are allowed on exams, but you can use them on homework assignments and in class (though you should practice with the calculator you will use on exams). The two acceptable calculators for exams are the TI-30XIIS or the TI-30Xa (pictured below). **Any other calculators will not be allowed on exams.** If you are having difficulty obtaining the correct calculator, talk to Dr. Starr during the first week of class for assistance. **Calculators will not be provided to those who do not bring the correct calculator to exams**.



- Access to iClicker Cloud. This is free for Purdue students and information about how to create an account can be found at this link. You can use the iClicker app on your smartphone. We will test this out the first day of class and iClicker will be used for all in-class questions. You will be added to the course through the Brightspace roster, so if any action is needed after creating an account, we will do so the first day of class. You can ONLY use an account associated with your Purdue email if you want your points to be counted.
- Approved safety goggles. Safety goggles must be worn at all times in the laboratory. You can purchase splash-proof goggles at the CHAS Chemistry Storeroom on the day you come into lab, or online. If you purchase goggles online, your splash-proof goggles must meet ANSI Z87.1:2020 (+D3) standards. Failure to meet those standards will result in inadequate lab attire and you will either have to purchase a new pair or be dismissed from lab.
- Digital Materials Charge: Students enrolled in this course must purchase digital materials for lab ($35). This digital content is required; students cannot complete the course without access to it. The materials will be released online on a real-time (approximately weekly) basis during the Spring 2026 semester. You will purchase access to the digital materials via a Purdue University Online link (http://www.eventreg.purdue.edu/online/CHMSpring35). Payment is due by January 23, 2026.
- Note: Other materials may be provided by the instructor.

Course website

Brightspace is our course management system. You can access the course website at http://purdue.brightspace.com. Most class materials, including chapter reading guides and laboratory handouts, will be made available on our class Brightspace site. Brightspace will also be used for your grade records and class notes.

Achieve: Homework, Extra Credit, E-book and Resource Access

Achieve is used for:

- Homework assignments
- Access to E-book and related chapter materials

Recitation

Recitation sessions will be conducted by your TA. These sessions are designed to help you prepare for laboratory work and to learn by completing additional practice problems with the guidance of your TA. The recitation time may also be used to review key concepts from lecture material, work on problems from the Achieve problem sets, remind students about upcoming deadlines, address questions in preparation for or to clarify after exams, and address questions regarding laboratory procedures or reports. Please come to recitation prepared with questions.

Students will submit the solution to one question in recitation each week through Gradescope. This question will be solved together and due at the end of your recitation. If you do not attend recitation, you can still submit a solution to the problem, but the submission is only open during the time of your recitation. It is considered an honor code violation to share the solution with any student who did not attend recitation until all recitations for the day have ended (5:30pm).

Recitations are not recorded. There is no penalty for missing recitation if you submit the recitation assignment.

Exams

There will be three (3) during-semester exams and a comprehensive final exam in this course. All exams will be in-person in the evening. Dates for midterm exams are included below. Each midterm exam will be one hour long. Exact exam policies will be given separately to this syllabus. Details for the Final Exam will be given separate to this syllabus as well.

Midterm 1: Thursday, 2/5, 8-9pm, PHYS 114

Midterm 2: Tuesday, 3/3, 8-9pm, PHYS 114

Midterm 3: Tuesday, 4/7, 8-9pm, PHYS 114

Course Learning outcomes

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

1. Demonstrate competency of CHM 12600 chemistry concepts through solving of numerical-based chemistry problems.
    - Methods of Evaluation: On-line homework assignments, extra problem sets, in-class problems, recitation problems, and numerical-based problems on exams
2. Demonstrate a mastery of concepts, theories, and ideas of chemistry topics covered in CHM 12600.
    - Methods of Evaluation: Written explanations in problem sets and conceptual and qualitative problems on exams
3. Connect CHM 12600 chemistry topics to real-world problems and solutions that you and others experience.
    - Methods of Evaluation: Written answers using evidence-based arguments in problem sets and numerical and qualitative problems on exams and in class.

4. Meet the Laboratory Learning Objectives (given during each lab).
    - Methods of Evaluation: Written lab reports.

Class Policies

- If you feel sick, do not come to class or lab.

- You may use computers or tablets only for taking notes in class. Phones can be used for iClicker Cloud or Gradescope (for recitation) only. Use of computers/cell phones/tablets or other internet connected device during class to access non-class related materials (TikTok, youtube, text messages, social media, etc.) is prohibited.

- All work must be completed individually, with the exception of problem-sets/worksheets that you can work on with your peers in office hours. If you do work with another person on these assignments, make sure you upload your own work. If two people submit the same files, both will earn a score of 0 and could be reported for academic dishonesty. Many laboratory experiments may be done in teams of two or three, however, each laboratory report should be completed individually. You are encouraged to ask about any assignments you find challenging in office hours so we can help.

- Artificial Intelligence (AI), Large Language Models (LLM), or similar generative technologies are not needed to complete this course. Their use to generate answers (written or math-based) for any homework assignments are prohibited. The use of ChatGPT or other AI agents is not banned in the class, however, it should not take the place of your own writing, and you need to ensure that you also confirm facts that are generated, because these tools do not check the accuracy of your claims. If you use an AI agent, you must specify the AI agent used, the time and date used, the prompts used to generate text, the sections containing AI-generated text, and the ideas resulting from AI use.

- In general, class lectures (audio recordings, lecture notes, and images therein) are "considered to be 'derivative works' of the instructor's presentations and materials, and they are thus subject to the instructor's copyright in such presentations and materials." As such, they cannot be sold or bartered or posted online without express written permission from Dr. Starr.

- **Changing Sections / Dropping the Course / Check-Out:**

    - A change in lab section requires the approval of Dr. Starr after the first week of classes. Because of the processes associated with assigned lab drawers and the formation of teams for lab work, section changes (or late additions to the course) will not be permitted after the second week of classes. Note that if you change sections after you check into a lab drawer, you must check out of your old lab drawer before checking into a lab drawer in your new section.

- If you drop CHM 12600 after having checked into a lab drawer, it is your responsibility to check-out of your lab drawer during your scheduled lab period. Failure to check-out of lab will result in a $45 fee, and forfeiture of the right to determine the acceptability of all lab drawer equipment.
- University Drop Deadlines
  - January 26: last day to drop a course via MyPurdue without it appearing on your record.
  - April 16: Last day to drop a CHM 12600 with a "W". Requires advisor approval.

Grading

The grade for CHM 12600 consists of the following:

- 10 homework problem sets, scaled to 10 pts. each. Homework answers are submitted on-line via the Achieve website. Late submissions will be accepted with a penalty (25% off per day for up to three days), unless an extension is granted for an excused reason.

- Three exams, 50 pts. each. Exams consist of a combination of multiple choice and numerical problems. Problems are both qualitative and quantitative. Partial credit will be awarded for correct work shown on free response questions. Make-up exams will be given for excused reasons only.

- Laboratory: 10 pts. each. 12 laboratory experiments will be conducted with individual reports completed for each lab. Late submissions will not be accepted and missed labs are scored as a zero grade. Students who fail to complete 10 labs will fail the course, unless excused by Dr. Starr.

- Problem sets: 12 pts. each. You will complete three problem sets/worksheets during the semester for the following topics: kinetics, acid-base, oxidation numbers/redox. These problem sets will be graded partially for completion and partially for correctness.

- Test corrections: 4 pts. each. 3 sets of corrections. After each midterm exam, you will be asked to submit test corrections for all questions you missed through Gradescope. This will not change the score on your exam, but it is a separate assignment for points. Dr. Starr and the TAs are happy to help you with corrections in office hours.

- Weekly Recitation Problem: 1 pt. each, 12 recitations. Each week, you can submit the solution to a problem from recitation to earn a point. The assignment will only be open during your recitation time. If you do not attend recitation, you can still submit the solution to the question during the time of your recitation.

- In-class problems: Extra credit (~12-20 pts). Each day in class, we will use iClicker to respond to in-class questions. Each day is worth 0.25-0.5 points depending on the difficulty and the number of questions. In-class problems earn extra credit on top of the other points in the class. The total points that will be used to calculate your score (the

denominator) will not change, but the points you earn from in-class problems will add to the total points earned (numerator).

- Comprehensive final exam: 100 pts.

Assignment	Points for each	Total Number	Total points
Achieve Homework	10	10	100
Lab Reports	10	12	120
Recitation Question	1	12	12
Problem sets	12	3	36
Test Corrections	4	3	12
Midterm Exams	50	3	150
Final Exam	100	1	100
Total Points			530

- Grading Scale (% out of 530 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

Note: Grades are rounded to one decimal place only. There will be no curve, but there is ample opportunity to earn extra credit throughout the course by answering in-class questions.

Incompletes

A grade of Incomplete (I) will be given only in unusual circumstances. To receive an "I" grade, a written request must be submitted prior to the last lecture date and approved by the instructor. Requests are accepted for consideration but in no way ensure that an incomplete grade will be granted. The request must describe the circumstances, along with a proposed timeline for completing the course work. You will be required to fill out and sign an "Incomplete Contract" form that will be turned in with the course grades. Any requests made after the course is completed will not be considered for an incomplete grade.

Attendance:

Attendance in lecture and recitation is not required for a grade, however, you will be responsible for all information, including assignments, policy changes, schedule changes, etc., announced in lecture or via Brightspace announcement to the class. Recordings of lectures and class lecture notes will be available on our class Brightspace.

Excused Absences

Missed work (homework, extra practice, lab, exams) will be excused, extended, or allowed for make up in the following cases:

- Grief Absence Policy (GAPS), Military Absence Policy (MAPS), Jury Duty, Parenting Leave, Medically Excused Absence Policy for Students (MEAPS): Students must work with the Office of the Dean of Students (ODOS) for any of these excused absences.

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 (https://www.purdue.edu/advocacy/students/absences.html) 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. Reach out to Dr. Starr for more information on requesting make-up work or deadline extensions.
- If your illness is not a medical emergency, then a missed lab can be made up with an online version (only eligible for 2 of these). Any other assignments are still due

at the posted due dates. For special consideration, contact Dr. Starr. For privacy reasons, we are prohibited from accepting medical documentation, so please do not include it.
- Other emergency external circumstances will be handled on a case-by-case basis by Dr. Starr.

If you are sick, do not come to lecture or recitation, instead, watch the lecture recording.

If you are sick, do not come to lab. Instead, inform your TA and an online version of the lab will be assigned. Note: You MUST notify your TA that you are sick ***before*** your lab period starts in order to receive an online version of the lab, or else you will receive a 0 grade for the lab. Students are only allowed to complete the online versions of two labs for unexcused reasons. If you have a third unexcused lab absence, you will automatically receive a score of 0. Please note that the due dates for lab reports for online labs are the same as the in-person labs.

In most cases, homework, labs, and tests that result from one of the above excused absences must be made up on schedule, however, an extension may be given at the discretion of Dr. Starr. ***Official accommodations for extra time, quiet testing room, etc. must be approved by the DRC.***

Certain instances are unexcused:

- being dismissed from lab for safety violations, including improper dress and goggle infractions
- arriving more than 10 minutes late for lab
- Missing lab without notifying your TA prior to the start of lab
- leaving lab early or otherwise not completing the lab project and/or report
- inadequate preparation that hinders lab participation
- not contributing constructively to the group's work in lab
- failure to submit a complete lab report (any lab report that is submitted with less than 75% completed).
- Missing a third lab after completing 2 online labs

All of the above instances result in an automatic score of 0 for a lab and are considered a "failure to complete." Failing to complete **more than 2** labs results in automatic failure of the course.

Course Evaluation

During the last two weeks of the course, you will be provided with an opportunity to evaluate this course and your instructor. Purdue uses an online course evaluation system. You will receive an official email from evaluation administrators with a link to the online evaluation site. You will have up to two weeks to complete this evaluation. 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.

An opportunity to evaluate your TA will also be provided.

Sources of Help

There are several free sources of help for CHM 12600 students:

- Professor office hours
- TA office hours
- Chemistry Resource room – https://www.chem.purdue.edu/academic_programs/resource-room/index.html

Academic Integrity

Purdue prohibits "dishonesty in connection with any University activity. Cheating, plagiarism, or knowingly furnishing false information to the University are examples of dishonesty." [Part 5, Section III-B-2-a, University Regulations] Furthermore, the University Senate has stipulated that "the commitment of acts of cheating, lying, and deceit in any of their diverse forms (such as 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." [University Senate Document 72-18, December 15, 1972]

Please review the following resource pages:

https://www.purdue.edu/odos/academic-integrity

In CHM 12600, academic integrity means "doing your own work" at all times. Discussion of chemical concepts is encouraged, but sharing your answers and work in person, electronically, or on social media for the express purpose of letting other students copy your work is not acceptable. Such a use of technology does not help you learn the material and is considered academic dishonesty. Note: Changing data for a lab project to fit the perceived answer; that is, what you think the answer should be, also constitutes academic dishonesty.

All incidents of academic integrity are referred to the Office of the Dean of Students. Any violation of course policies as it relates to academic integrity will result minimally in a failing or zero grade for that particular assignment, and at the instructor's discretion may result in a failing grade for the course. A student accused of academic dishonesty will be afforded due process as defined by Purdue University procedures. Students who observe an issue of academic integrity can report it to the Office of the Dean of Students (https://www.purdue.edu/odos/ - see academic dishonesty report), call 765-494-8778 or email integrity@purdue.edu.

*The Purdue Honor Pledg*e:

"As a boilermaker pursuing academic excellence, I pledge to be honest and true in all that I do. Accountable together - we are Purdue"

Nondiscrimination Statement

In this course, each voice in the classroom 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.

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.

A note from Dr. Starr: I strive to make each of my classes a welcoming space. If there is anything I can do to better support you, please do not hesitate to reach out. This class is going to have students who already know most of the material and students who know very little. If you do not already know some/most of this content, that alone will absolutely not prevent you from succeeding in this course. I'm here to help. You just have to tell me. ☺

Accessibility and 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 share your DRC Course Accommodation Letter (CAL) via the AIM system *at least one week before* an exam or assessment for which accommodations are desired. Instructions on sharing your Course Accommodation Letter can be found by visiting: **https://www.purdue.edu/drc/students/course-accommodation-letter.php**

Implementation of accommodations may not be possible if we do not have access to your CAL or if insufficient notification is given. Unless otherwise noted by Dr. Starr, students with accommodated testing will take their exams in an alternate location in WTHR at the regularly scheduled exam time. Information will be shared with students after CALs are received.

Safe Learning Environment

As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. I also have a mandatory reporting responsibility related to my role as a faculty member. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep information you share private to the greatest extent possible. However, I am required to share information regarding sexual misconduct or information about a crime that may have occurred on Purdue's campus with the University. Students may speak to someone confidentially by

contacting the Center for Advocacy, Response, and Education (CARE) at 765-495-CARE (2273).

Mental Health

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.

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 in West Lafayette.

Emergencies -- If there is an emergency, call 911.

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 instructor or TA via email or phone. You are expected to read your @purdue.edu email on a frequent basis.

A link to Purdue's Information on Emergency Preparation and Planning is located on our Brightspace under "University Policies and Statements." 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 Preparedness for Classrooms document*.

The Campus Emergency Status webpage is your primary online resource for current and developing PurdueALERT information and changes to the operational status of campus.

Additional Syllabus Items:

Our class Brightspace page contains various, official University materials:

- Student Support and Resources
- University policies and statements

These resources are considered to be part of this syllabus per Purdue policy.

Lab Safety

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

- Dress appropriately (see below).
- Goggles are required at all times in the laboratory, including during 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). You can purchase splash-proof goggles at the CHAS Chemistry Storeroom on the day you come into lab, or online. If you purchase goggles online, your splash-proof goggles must meet ANSI Z87.1:2020 (+D3) standards. Failure to meet those standards will result in inadequate lab attire and you will either have to purchase a new pair or be dismissed from lab.
- Wear gloves.
- 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 are not allowed in the labs. (No water bottles in lab!)
- 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.

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
  - see-through, transparent or sheer clothing
  - pants that are ripped or have holes in the fabric of *any* size

- tights or thin (translucent or transparent) leggings
- Capri or cropped pants
- shorts
- short skirts
- open-toed and/or open-heeled shoes (including Crocs, Birkenstocks or other clogs)
- Ugg boots
- 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 and it will count as a missed lab. Remember that if you miss more than 2 labs, you automatically fail the course, so please take the lab rules very seriously.

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

Class and laboratory schedule:

Note: 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 communicated via announcements through Brightspace. You are expected to check Brightspace every day. **All due dates below are 11:59pm** with the exception of recitation assignments. Recitation assignments are due each day of recitation and must be submitted during your scheduled recitation period.

Week	Day	Date	Lecture or Lab Topic	Notes
1	Monday	Jan-12	Course overview & Syllabus Review, Chapter 12	
	Tuesday	Jan-13	Recitation 1	
	Wednesday	Jan-14	Chapter 12	
	Thursday	Jan-15	Lab Check in Lab 1: Intermolecular forces	Safety Certification Quiz due (does not count toward course grade)
	Friday	Jan-16	Chapter 12	
	Sunday	Jan-18	Lab 1 due	Lab 1 due
2	Monday	Jan-19	No Lecture – MLK Day	
	Tuesday	Jan-20	Recitation 2	
	Wednesday	Jan-21	Chapter 12	
	Thursday	Jan-22	Lab 2: TLC	
	Friday	Jan-23	Chapter 12	
	Sunday	Jan-25	Lab 2 due	Lab 2 due
3	Monday	Jan-26	Chapter 12	
	Tuesday	Jan-27	Recitation 3	
	Wednesday	Jan-28	Chapter 13	Chapter 12 Homework due
	Thursday	Jan-29	Lab 3: Freezing point depression	
	Friday	Jan-30	Chapter 13	
	Sunday	Feb-1	Lab 3 due	Lab 3 due

4	Monday	Feb-2	Chapter 13	
	Tuesday	Feb-3	Recitation 4	
	Wednesday	Feb-4	Chapter 14	Chapter 13 Homework due
	Thursday	Feb-5	Lab 4: Chemical Kinetics **Exam #1**	Exam #1 covers chapters 12 & 13
	Friday	Feb-6	Chapter 14	
	Sunday	Feb-8	Lab 4 due	Lab 4 due
5	Monday	Feb-9	Chapter 14	
	Tuesday	Feb-10	Recitation 5	
	Wednesday	Feb-11	Chapter 14	Exam 1 Test corrections due
	Thursday	Feb-12	Lab 5: Activation Energy	
	Friday	Feb-13	Chapter 14	
	Sunday	Feb-15	Lab 5 due	Lab 5 due
6	Monday	Feb-16	Chapter 14	
	Tuesday	Feb-17	No Recitation	
	Wednesday	Feb-18	Chapter 15	Chapter 14 Homework due
	Thursday	Feb-19	No Lab: Kinetics Worksheet	
	Friday	Feb-20	Chapter 15	Kinetics worksheet due
7	Monday	Feb-23	Chapter 15	
	Tuesday	Feb-24	Recitation 6	
	Wednesday	Feb-25	Chapter 15	
	Thursday	Feb-26	Lab 6: Iron(III) Thiocyanate Equilibrium System	
	Friday	Feb-27	Chapter 16	
	Sunday	Mar-1	Lab 6 due	Lab 6 due
8	Monday	Mar-2	Chapter 16	Chapter 15 Homework due

	Tuesday	Mar-3	Recitation 7 **Exam #2**	Exam #2 covers chapters 14-15, beginning of 16
	Wednesday	Mar-4	No class!!	
	Thursday	Mar-5	Lab 7: Essentials of Acids & Bases	
	Friday	Mar-6	Chapter 16	
	Sunday	Mar-8	Lab 7 due	Lab 7 due
9	Monday	Mar-9	Chapter 16	Exam 2 test corrections due
	Tuesday	Mar-10	Recitation 8	
	Wednesday	Mar-11	Chapter 16	
	Thursday	Mar-12	Lab 8: Acid-Base Equilibria	
	Friday	Mar-13	Chapter 17	**Lab 8 Due** **Chapter 16 Homework due**
March 16-21 – Spring Break				
10	Monday	Mar-23	Chapter 17	
	Tuesday	Mar-24	Recitation 9	
	Wednesday	Mar-25	Chapter 17	
	Thursday	Mar-26	Lab 9: Ksp	
	Friday	Mar-27	Chapter 18	Chapter 17 Homework due, acid-base worksheet due
	Sunday	Mar-29	Lab 9 due	Lab 9 due
11	Monday	Mar-30	Chapter 18	
	Tuesday	Mar-31	Recitation 10	
	Wednesday	Apr-1	Chapter 18	
	Thursday	Apr-2	Lab 10: How Do We Determine K, ΔH, ΔS, ΔG	

	Friday	Apr-3	Chapter 18	
	Sunday	Apr-5	Lab 10 due	Lab 10 due
12	Monday	Apr-6	Chapter 18	Chapter 18 Homework Due
	Tuesday	Apr-7	No recitation **Exam #3**	Exam #3 covers chapters 16-18
	Wednesday	Apr-8	Chapter 19	
	Thursday	Apr-9	No Lab – Ox. Numbers Worksheet	
	Friday	Apr-10	Chapter 19	Ox. Numbers Worksheet due
13	Monday	Apr-13	Chapter 19	Exam 3 test corrections due
	Tuesday	Apr-14	Recitation 11	
	Wednesday	Apr-15	Chapter 21	Chapter 19 Homework Due
	Thursday	Apr-16	Lab 11: A Metal Ion Sensor	
	Friday	Apr-17	Chapter 21	
	Sunday	Apr-19	Lab 11 due	Lab 11 due
14	Monday	Apr-20	Chapter 23	Chapter 21 Homework Due
	Tuesday	Apr-21	Recitation 12	
	Wednesday	Apr-22	Chapter 23	
	Thurs	Apr-23	Lab 12: Luminol	
	Friday	Apr-24	Chapter 20	**Lab 12 Due**, Chapter 23 HW Due
15	Monday	Apr-27	Chapter 20	
	Tuesday	Apr-28	No Recitation	
	Wednesday	Apr-29	Chapter 20	
	Thursday	Apr-30	Lab Checkout	

	Friday	May-1	Final Exam Problem Solving	
16	TBD	May 4-9	Final Exam, date and time TBD.	

Disclaimer: This syllabus is subject to change.