Instructor: Prof. Alexander Wei  
Lectures: Wed. & Fri., 8:30–9:20 am, WTHR 200

Email: alexwei@purdue.edu  
Office Hours: Wed. 9:30 am, BRWN 4103-D.

I am happy to answer questions related to lecture materials or homework during these times! For administrative issues, please contact the General Chemistry Office at genchem@purdue.edu.

About Chemistry 11100: This is a foundational general chemistry course for agriculture, health and human science, and other majors. The stated minimum prerequisite for Chemistry 11100 is two years of high school algebra. Our primary objective is to help you understand fundamental chemistry concepts, set up and solve calculations, balance chemical equations, and develop laboratory skills you will need in future classes. We have a diverse group of students and majors, all of whom will need to relate the principles encountered in CHM 11000 to topics in future courses.

In this course, we will first review measurements, related mathematics, and energy in different forms. We will then look at atoms and isotopes, ions, and compounds, and introduce the mole as a basic unit in chemistry. These will be applied to chemical formulas, and predicting the outcome of chemical reactions. Next, we will learn about the periodic table and how it is organized, and how atoms bond to form molecules of different shapes and sizes.

CHM 11100 emphasizes both conceptual understanding and practical problem solving. This semester, weekly laboratory activities will be offered online; they are intended to reinforce your understanding of topics discussed in lecture, and to develop thought processes for designing simple experiments.

Read on to learn about the required materials, lecture and lab schedules and policies, recommended ways to study for chemistry, grading, and other important procedures.

This course meets the Science requirement of Purdue University's Foundational Core.

CHM 11100 Teaching Staff: The Chemistry 11100 team includes the instructor (Dr. Wei), 5 graduate teaching assistants, and the General Chemistry Office staff. We are all committed to help you learn chemistry that will enable you to achieve great things with your major!

Jennifer Garcia (garcia523@purdue.edu): Recitation and lecture coordinator
Benjamin Washer (bwasher@purdue.edu): Laboratory coordinator, recitation leader for Sec. OL1
Diego Calderon-Arrieta (calderod@purdue.edu): Recitation leader for Sec. 18, 20, 26, 28
Kenneth Onyedibe (konyedib@purdue.edu): Recitation leader for Sec. 19, 22, 25
Jesus Aldana-Mendoza (jaldanam@purdue.edu): Recitation leader for Sec. 21, 23, 27

All TA’s will hold office hours online via Webex (schedule to be posted on BrightSpace); these will be open to any student, regardless of their assigned sections.

General Chemistry Office (genchem@purdue.edu) The General Chemistry Office handles all the administrative details for CHM 11100. All non-chemistry questions should be directed to the General Chemistry Office, including grade checks, exam conflicts, clarification on course policies, resolution of grade issues, schedule changes (Weeks 2 and 3), and electronic approvals on University forms (e.g., add/drop forms). Instructional specialist Marybeth Miller and administrators Marlene Miller and Melissa Roadruck can help you to resolve a variety of issues related to course enrollment and attendance.
Online Educational Tools: All online resources will be managed through the Spring 2021 CHM 11100 BrightSpace Portal. Announcements, lecture handouts, video recordings, online lab assignments, and other course information will all be posted the BrightSpace page.

This semester’s textbook is Chemistry, 13th edition, by Chang (McGraw-Hill; ISBN: 978-1260694420). A link to the McGraw-Hill website is available through the CHM 11100 BrightSpace portal. Graded homework assignments are coordinated with McGraw-Hill’s CONNECT online program. You can purchase CONNECT from University Bookstores or directly through McGraw-Hill; an electronic copy of the textbook is included. If you would like to use a physical (hardbound) textbook, you must still purchase CONNECT through McGraw-Hill (ISBN: 978-1260694857). Very importantly, all online homework (CONNECT) must be submitted through BrightSpace in order to receive credit for these assignments!

Virtual laboratories and online lab reports will be managed through TopHat with access to BeyondLabz, an online lab simulation site. Please use the TopHat link in Brightspace to access and purchase the online lab manual. Detailed instructions on how to submit pre-lab assignments and online lab reports will be reviewed by your recitation leaders.

Essential Tools

Personal computers: All learning management systems are expected to be compatible with PCs (desktops and laptops) using Windows 10, and also with Macs. Compatibility with online browsers may vary depending on personal setup; technology support is available (see below). Computers need to be equipped with working cameras and audio support for online office hours (Webex and Zoom) as well as online exams, which will be proctored using Respondus Lockdown with browser monitoring.

Calculators: For homework and exams, you are encouraged to use simple, battery-operated scientific calculators with exponentials and scientific notation. A TI-30 calculator is ideal; two-line (non-programmable) calculators are also acceptable.

No physical laboratory materials or equipment will be required this semester!

Instructional Technology Support: This semester, Purdue is offering direct IT support through Technology Advocates, a group of students who have been trained to assist their peers in dealing with technical issues. The Technology Advocate for CHM 111 is Ryleigh Scott, who can offer guidance on frequently encountered problems through the Discussion Boards in BrightSpace (see below).

Supplemental Instruction (SI)

Dedicated study groups are available and open to anyone in CHM 11100 who wants to understand the course material in greater depth. Participation in SI sessions is voluntary, but has been found to be extremely beneficial. Students who attend will work with peers as they compare notes, discuss various problems and concepts, and share study tips and test-taking strategies.

This semester’s SI leader is Anna Remes (aremes@purdue.edu). Anna’s SI sessions will be held online twice a week (Sundays and Tuesdays at 4:30 pm); she also holds an online office hour on Wed. at 1:00 pm. Students are asked to present their student ID card after logging in, and to bring their questions to these informal, peer-led study sessions.
To-do list for Week 1 (and Week 2)

- Read all the information in this course packet!
- Purchase required learning materials through BrightSpace (see above).
- Register your CONNECT account, and complete the three (3) CHM 11100 Prep assignments (Structure of Matter, Foundational Skills, and Problem Solving) along with the “How to Use Connect” assignment.
- Begin your Week 1 HW assignment, and complete by end of Tues., Jan. 26. You should finish each weekly HW assignment before next Wednesday’s lecture!
- Meet with your in-person (or online) recitation leader to discuss expectations for submitting online homeworks and online laboratory reports.
- Complete on-boarding process for TopHat (online labs). You will be receiving an e-mail invitation, and must complete registration before Thurs., Jan. 28.
- (Week 2) Start and finish Lab 1 (Intro. to Excel), due Thurs. Jan. 28, 11:59 pm EDT.

Weekly Routine (starting Week 2)

- Check BrightSpace regularly for announcements and new information.
- Attend weekly recitations on Mon./Tues. to discuss online laboratory and HW assignments
- Complete previous week’s HW assignment by Tues. evening, before Wednesday’s lecture.
- Read assigned chapter in online lab manual and complete pre-lab exercises, before Wed. lecture
- Read assigned textbook pages, in preparation for Wed. lecture (see reading schedule at end of course packet).
- Attend Wed. and Fri. lectures (in person or via BoilerCast)
- Complete weekly virtual lab assignment (must be submitted by Thurs. 11:59 PM, EDT).
- Work on the next online HW assignment over the weekend, and bring your questions to recitation.

To accommodate for potential disruptions (poor Internet service, etc.), submission windows for online HW will remain open for one week after the posted due date (Tues. 11:59 pm EDT). However, it is essential to keep pace with the lectures-- don’t put off the HW to the following week!

NO grace periods will be provided for online labs—they must be completed the week they are assigned, as your TA’s will be grading these over the weekend.

Discussion Boards
We will be making active use of the Discussion Boards on BrightSpace, to address frequently asked questions about the homework and online lab exercises. Questions regarding connection issues can also be posted, and will be addressed by our Technical Advocate.

Need more help?
There are free resources for CHM 11100 students. In addition to your instructor and TA office hours, there is the virtual Chemistry Resource Room, a group of student volunteers who have taken general chemistry and can help you to understand and solve homework problems. We also encourage students to take advantage of our Supplemental Instructions (SI) sessions (see p. 2).

For other resources, check out the “Important Purdue Resources Handout” on the Purdue University Foundations of Excellence page at: http://www.purdue.edu/foundationsofexcellence.
Overview of CHM 11100 Activities and Policies

***For the most updated information, visit the CHM 11100 BrightSpace portal***

**Reading**
See the lecture schedule for the reading assignments. *We recommend reading all assigned materials at the beginning of each week, prior to lecture and laboratory.* Some material will be covered in lecture, but some must be reviewed on your own.

**Lectures**
Student versions of the lectures will be posted on BrightSpace, and will normally be available one day in advance (however, they might not contain the most recent changes). *You are strongly encouraged to bring these to class as handouts for note-taking and doing in-class problems.* Please keep in mind that they are outlines of the lectures, and may differ in content or page numbering. They are not substitutes for lecture attendance!

If you missed a lecture or are taking CHM 111 fully online, video recordings will be made available after each lecture on the BoilerCast website: [http://www.itap.purdue.edu/tlt/BoilerCast/](http://www.itap.purdue.edu/tlt/BoilerCast/). A link to each lecture will also be posted in the weekly tabs of the CHM 111 BrightSpace portal.

When attending lectures, please respect your instructor and classmates by turning off cell phones and other personal electronics during class. Personal laptops and tablets should be used only for note-taking or reading lecture materials; text messaging and social networking activities inside the classroom is discouraged. Talking during lecture is also distracting and disrespectful; if you have a question, raise your hand and we will do our best to answer it, but otherwise please allow everyone around you the opportunity to pay full attention to the lecture.

**Recitation**
On-campus students will meet with their recitation leader every week *in person*. Recitations are designed to help you understand both weekly class and laboratory activities, and to discuss any questions you might have from lecture or homework. Take advantage of this time to ask questions and check your approach to homework and pre-lab problems (so bring your HW questions to recitation!).

**Online homework (CONNECT)**
Your weekly online homework (HW) assignment will consist of required problems intended to test your understanding of the materials covered in the weekly lectures. Required questions will contribute toward your homework grade; extra questions and tutorials can also be useful to better understand how to approach homework problems, and also as practice and review for exams. *You are expected to complete weekly online HW assignments by Tuesday evening of the following week (before Wednesday’s lecture).*

For each HW question, you will have up to **three attempts** to obtain the correct answer (with feedback) before online submission. In addition, you will be permitted a second chance to re-submit answers for any questions you may have missed the first time. All HWs will be scored and recorded online; there is no hand grading or regrading. No further time extensions are possible for online HW assignments (as you are already given a week’s grace period in case of unforeseen disruptions).

Weekly HW assignments will be worth 10 or 20 points, depending on the week. The 14 assignments add up to 200 points; at the end of the semester, we will drop two 10-pt. assignments or one 20-pt. assignment, whichever is in your favor. *Your final HW grade will be based on a maximum of 180 points.*
LABORATORY
Laboratory exercises are an integral part of chemistry. This year we are not able to offer in-person labs, but have developed a complete set of virtual laboratory simulations and training that will enable you to experience nearly all of the chemical concepts discussed in lectures. There are 12 labs in total (20 pts. each); at the end of the semester, we will drop the lowest lab grade (or one missed lab). Your final lab grade will be based on a maximum of 220 points.

Online Laboratory Exercises
We will be using TopHat to conduct all laboratory activities and reports. Students will receive an e-mail invitation to register for TopHat (purchase required). You will need to complete the on-boarding process by Thursday, January 29, 11:59 pm EDT, in order to receive points for laboratory participation.

You must complete 9 of 11 scheduled lab projects (Labs 2–12) to fulfill the laboratory requirement. If you miss more than two lab projects (excluding Lab 1), an automatic grade of “F” will be assigned at the end of the semester, regardless of your HW and test scores.

All online laboratories must be completed by the deadlines published in the course schedule! Similar to in-person labs, there are no grace periods for late lab submissions, and we will not allow make-up labs except if covered by MAPS or GAPS policies.

Virtual laboratory experiments and lab reports will be conducted inidually and entirely online. We will use the following due dates and guidelines, starting at the end of Week 1 (1/22):

- Lab manual chapters and pre-labs for the week will be released the previous Friday evening.
- Weekly pre-labs will be due every Tuesday at 11:59 PM EDT (to be submitted through TopHat)
- Lab data, supporting information, and report templates will be made available by Tuesday 12:00 PM (noon) EDT.
- Completed lab reports will be due every Thursday at 11:59 PM EDT. Please take note of the following:
  - Click SAVE or SUBMIT after you type each response! There is no auto-save.
  - Label your graphs and tables.
  - Use the online data you collected (or were given) for calculations and analysis.
  - Use correct units of measurement and significant figures.
  - Apply all chemical terms and concepts correctly.
  - Ensure that results and conclusions are consistent with your data and observations.

You should be able to review your graded lab reports online within one week after submission. If you have questions about your grade, speak with your TA or the head lab coordinator.
EXAMS

Chemistry knowledge is cumulative. Hourly exams test your understanding of course material, and your ability to combine two or more concepts. These exams will represent at least 40% of your total grade. However, as a benefit to all students, your lowest exam score or ½ your final exam score will be dropped at the end of the semester. Your final exam grade will be based on a maximum of 600 points.

Spring 2020 online exam schedules (60 minutes within two-hour time window):

<table>
<thead>
<tr>
<th>Exam</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Thurs., Feb. 18</td>
<td>8:00 – 10:00 pm, EDT</td>
</tr>
<tr>
<td>II</td>
<td>Wed., Mar. 17</td>
<td>8:00 – 10:00 pm, EDT</td>
</tr>
<tr>
<td>III</td>
<td>Thurs., Apr. 15</td>
<td>8:00 – 10:00 pm, EDT</td>
</tr>
</tbody>
</table>

The date and venue for the CHM 111 Final Exam will be announced later in the semester.

- All online exams will be proctored using Respondus Lockdown, and must be taken within the time windows indicated above. Please note there are NO make-up exams or excused absences, aside from those covered by MAPS and GAPS. If you miss an exam, your score will appear as a zero until the end of the semester (at which point the lowest score will be dropped). Each additional missed exam also will be scored zero, and will count toward your total score.
- Preparation: Hourly exams will be based on weekly lectures and related HW assignments as follows:
  - Exam 1: Weeks 1–4
  - Exam 2: Weeks 5–8
  - Exam 3: Weeks 9–12 (with emphasis on 9, 10, and 11)

In addition to completing HW assignments on CONNECT, you may also wish to study the questions included in the weekly recitation study guides, and in your textbook at the end of each chapter.

- If you have a direct conflict with another online exam, class, or university-approved activity, you will need to contact the General Chemistry Office (BRWN 1144) at least one week before the conflict, and will need to provide written verification of the exam conflict. According to University regulations, a student is entitled to reschedule one of two conflicting exams and instructors shall not penalize a student who chooses to reschedule an exam under these conditions. In the event the student is unable to reach an agreement with the course instructors to reschedule an exam, the student will contact the Office of the Registrar, who will make the final decision as to which exam is to be rescheduled and offered at an alternate time. The Registrar will communicate this decision to the course instructor and relevant department head. If an emergency occurs, contact the General Chemistry Office (BRWN 1144) as soon as possible.

- Hourly exams are exactly one hour in length, and must be completed within one sitting; however, you will have some flexibility when to start within the two-hour time window. For online students outside of a US time zone, alternate arrangements can be arranged as needed. Please note that Respondus Lockdown with browser monitoring requires students to remain in front of the computer at all times during the exam (so be sure to take care of all your physical needs before starting!).

- Students should prepare for CHM 111 exams as if taking it in a classroom setting without books or notes (as well as other people or the Internet). They will be permitted to use scratch paper, standard writing utensils (pen, paper, and eraser), a simple handheld calculator, and a Periodic Table. Test questions will be original, and designed such that they cannot be answered by simply looking up information, such as with notes stored on a computer.
Final Exam

- The final is a 2-hour comprehensive exam covering the entire semester, but with added emphasis on materials not tested in the three hourly exams (more weight will be given to the last 3 weeks of the semester). As before, we recommend reviewing both HW problems on Connect and questions accompanying your weekly recitation study guides and in your textbook. Also, check Announcements on BrightSpace for special review sessions or workshops.

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

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

Determining your Course Grade

The points for each assigned course activity in CHM 11100 are listed below. Before course grades are finalized, the following scores will be dropped:

- your lowest homework score(s) (max. 180 / 200 pts)
- your lowest lab score (max 220 / 240 pts)
- your lowest exam score or ½ of your final exam score, whichever is less (max 600 / 750 pts)

The total number of points for CHM 11100 will be distributed as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>180 pts</td>
</tr>
<tr>
<td>Labs</td>
<td>220 pts</td>
</tr>
<tr>
<td>Exams</td>
<td>450 pts</td>
</tr>
<tr>
<td>Final Exam</td>
<td>300 pts</td>
</tr>
<tr>
<td>Sub-total</td>
<td>1,150 pts</td>
</tr>
<tr>
<td>Drop</td>
<td>−150 pts</td>
</tr>
<tr>
<td>Total</td>
<td>1,000 pts</td>
</tr>
</tbody>
</table>

After the Final Exam, your course grade will be based on the following scale:

A: 875 pts and above
B: 775 – 874 pts
C: 675 – 774 pts
D: 575 – 674 pts
F: 0 – 574 pts OR if you fail to complete 3 or more of the 11 scheduled lab projects (Labs 2–12). **Missing more than 2 online labs = automatic F.**

Electronic records of your graded lab reports and exams will be maintained throughout the semester on BrightSpace. Use these to check that the lowest homework, lab, and exam (or ½ final exam) scores were deducted from your adjusted total, after receiving your course letter grade for CHM 11100. Any discrepancies must be reported and verified by the instructor within 24 hours of final grade release.
Administrative Policies

Studying Chemistry
Students should expect to devote at least 6–9 hours per week on CHM 11100, outside of normal class time and lab. Regular activities should include: reading and preparations before lecture, reviewing notes after lecture, completion of online homework and lab assignments, and preparing for exams. Additional time may be reserved for: attending SI sessions, extra help sessions, and office hours (see below).

Sources of Help
There are several free sources of help for CHM 11100 students, including: professor office hours, TA office hours, the virtual Chemistry Resource Room, and SI sessions. Further resources can be found in the “Important Purdue Resources Handout” at: http://www.purdue.edu/foundationsofexcellence/.

Emergencies

In the event of a major campus emergency, course requirements, deadlines and grading schemes may be subject to changes due a revised semester calendar or other circumstances beyond the instructor’s control. Relevant changes to CHM 11100 will be sent by e-mail announcements, posted on the course BrightSpace page, or can be obtained by contacting the General Chemistry Office (765-494-5250), instructor, or head TAs via email. Please be sure to check your @purdue.edu email on a frequent basis.

“Shelter in Place” means seeking immediate shelter inside a building or University residence. This course of action may need to be taken during a tornado, earthquake, release of hazardous materials in the environment, active shooter, building intruder, or a civil disturbance. If you hear the All Hazards Outdoors Emergency Warning Sirens or are notified via text or other means, immediately go inside a building to a safe location and use all communication means available to find out more details about the emergency. Remain in place until police, fire, or other emergency response personnel provide additional guidance. Please note there is no “all safe” siren; the notification will come via text, internet, or email announcement.

Absences
• The lowest score in each category (lab grade, HW, exam) will be dropped at the end of the semester to accommodate unforeseen or unavoidable absences. If you have concerns about multiple absences affecting your grade, contact the General Chemistry Office.

• Absences caused by participation in University-approved activities must verified and accepted by the instructor at least one week in advance. Grief and military absences (GAPS and MAPS) are the only other excused absences accepted in CHM 11100.

Grief Absence Policy for Students (GAPS)
If you experience the death of a family member or close friend, notify the Office of the Dean of Students at 765-494-1747. Scores for any missed assignments under a verified GAPS absence will be pro-rated (assigned a score based on your average and the class average). Final arrangements will be determined by the CHM 11100 course instructor (Prof. Wei).

Military Absence Policy for Students (MAPS)
In the case of a mandatory call to duty, students should contact the Office of the Dean of Students (ODOS) and request that a leave notice be sent to the instructor as soon as the student is informed of the dates of mandatory absence. Given proper documentation, the instructor will excuse the student from class and provide opportunities to earn equivalent credit and/or demonstrate evidence of achieving the learning outcomes for missed assignments or assessments.
If you anticipate or experience an absence that will be for an extended period (one week or more), contact the Office of the Dean of Students at 765-494-1747. A member of the Dean of Students staff will notify the student’s instructor(s) of the circumstances. The student should be aware that this intervention does not change in any way the outcome of the instructor’s decision regarding the student’s academic work and performance in any given course.

Adding/Dropping CHM 111

<table>
<thead>
<tr>
<th>Important course-related deadlines – Spring 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mon, Feb 1:</strong> Last day to cancel (drop) a course without it appearing on your record.</td>
</tr>
<tr>
<td><strong>Fri, Feb. 1:</strong> Last day to switch from another CHM course to CHM 11100 (subject to instructor approval)</td>
</tr>
<tr>
<td><strong>Mon, Feb 1:</strong> Last day to cancel (drop) a course without a grade. (students can drop course with advisor’s signature through Feb. 12, but it will be recorded as a W.)</td>
</tr>
<tr>
<td><strong>Mon, Mar. 22:</strong> Last day to cancel (drop) a course (with passing or failing grade)</td>
</tr>
</tbody>
</table>

Adding the Course/Late Registration: Students are generally not allowed to add CHM 11100 after the 3rd week of the semester. In any case, the General Chemistry Office must be notified no later than the 4th week in order to make up missed assignments for credit.

Disability Accommodations
If you require special accommodations to access course activities or materials, they must be described and approved by the Disability Resource Center (Young Hall, Rm. 830, 302 Wood St., 765-494-1247, www.purdue.edu/drc). To implement accommodations, follow the instructions listed as “Responsibilities of the Student” in the letter prepared by the DRC. Take a copy of this letter to the course coordinator in BRWN 1144 within the first three weeks of the semester (by Feb. 5) or within one week of the date of the letter to discuss your accommodation needs. Timely notification of the course coordinator is critical for implementation. Please also take your letter to BRWN 1144 so that your exams can be scheduled to be taken within the Department of Chemistry.

Diversity and Inclusion 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 support Purdue's commitment to diversity, and 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. See: http://www.purdue.edu/diversity-inclusion/

Academic Integrity: Statement and consequences
Please visit: http://www.purdue.edu/odos/osrr/academic-integrity/index.html

Protect Purdue
The Protect Purdue Plan, which includes the Protect Purdue Pledge, is campus policy and as such all members of the Purdue community must comply with the required health and safety guidelines. Required behaviors in this class include: staying home and contacting the Protect Purdue Health Center (496-INFO) if you feel ill or know you have been exposed to the virus, wearing a mask in classrooms and campus building, at all times (e.g., no eating/drinking in the classroom), disinfecting
desk/workspace prior to and after use, and maintaining proper social distancing with peers and instructors (including when entering/exiting classrooms). Please also avoid shared use of personal items and maintain robust personal hygiene (e.g., handwashing, disposal of tissues) prior to, during and after class, and following all safety directions from the instructor.

Students who are not engaging in these behaviors will be offered an opportunity to comply, but if non-compliance continues, the instructor may ask the student(s) to leave class. Those who do not comply with required health behaviors are violating the University Code of Conduct, and will be reported to the Dean of Students Office.

Furthermore, any student who has substantial reason to believe that another person close by is threatening the safety of others by not complying (e.g., not wearing a mask) may leave the room without consequence. Students are encouraged to report non-compliant behavior and discuss next steps with their instructor. Students also have the option of reporting the behavior to the Office of the Student Rights and Responsibilities. See also Purdue University Bill of Student Rights.

Quarantine or Isolation
If you become quarantined or isolated at any point in time during the semester, in addition to support from the Protect Purdue Health Center, you will also have access to an Academic Case Manager who can provide you academic support during this time. Your Academic Case Manager can be reached at acmq@purdue.edu and will provide you with general guidelines/resources around communicating with your instructors, be available for academic support, and offer suggestions for how to be successful when learning remotely. Importantly, if you find yourself too sick to progress in the course, notify your academic case manager and notify me via email or Brightspace. We will make arrangements based on your particular situation. The Office of the Dean of Students (odos@purdue.edu) is also available to support you should this situation occur.

Mental health and Wellness Statement
If you find yourself beginning to feel some stress, anxiety and/or feeling overwhelmed, visit the WellTrack website at https://purdue.welltrack.com/. Sign in and find information and tools at your fingertips, available to you at any time.

If you find yourself struggling to find a healthy balance between academics, social life, stress, etc. you can also sign up for free one-on-one virtual or in-person sessions with a Purdue Wellness Coach at RecWell: https://www.purdue.edu/recwell/. Student coaches can help you navigate through barriers and challenges toward your goals throughout the semester. Signup is completely free and can be done on BoilerConnect.

If you need additional support and information about options and resources for mental well-being, contact or see the Office of the Dean of Students. Call 765-494-1747. Hours of operation are M-F, 8 am- 5 pm. For further questions, also contact Purdue Wellness at evans240@purdue.edu.

For details about other Purdue University policies, including academic integrity, class attendance and absence reporting, emergency, nondiscrimination, and disability services, visit the BrightSpace portal.
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture Topic</th>
<th>Reading (Textbook)*</th>
<th>Online lab / HW activities (Top Hat / Connect / BrightSpace)</th>
<th>Exams &amp; HW due dates*</th>
</tr>
</thead>
</table>
| 1    | 20 – Jan   | Course Overview; Introduction                                                  | 1.1 – 1.7 (self-review) 2.1 – 2.2 (self-review) | Registration for TopHat  
Preparative assignments: “How to Navigate and Use Connect” and: (1) Structure of Matter, (2) Foundational Skills, (3) Problem Solving  
Online (Connect) homework, Week 1 | Prep. Assign.:  
Thur. 28-Jan, 11:59 pm EDT (hard deadline, late submissions not accepted) |
|      | 22 – Jan   | Scientific Notation; Significant Figures; Dimensional Analysis; Unit Conversions | 1.8 – 1.9; pp. 18–27 |                                                             |                       |
| 2    | 27 – Jan   | Atomic Theory; The Periodic Table                                              | 2.3 – 2.4; pp. 48–51 3.1; pp. 80–81 | L1: Introduction to Excel, Chapter 1  
Registration into TopHat required; complete by Thurs., Jan. 28  
Online (Connect) homework, Week 2 | Week 1 HW:  
Tues., 26-Jan  
(also see Prep. Assign. deadline) |
| 3    | 3 – Feb    | Electron Configurations; Valence and Core Electrons;                          | 7.8 – 7.9; pp. 301–311 | L2: Measuring Density, Chapter 2  
Lab report due by Thurs., Feb. 4  
Online (Connect) homework, Week 3 | Week 2 HW:  
Tues., 2-Feb |
|      | 5 – Feb    | Periodicity of Electron Configurations; Electron Configuration of Ions;        | 8.2 – 8.3; pp. 329–339 |                                                             |                       |
|      |            | Size of Atoms & Ions                                                          |                     |                                                             |                       |
| 4    | 10 – Feb   | Molecular & Ionic Compounds, And How to Name Them                               | 2.5– 2.6; pp. 52–57 2.7; pp. 61–63 | L3: Atomic emission spectra (flame test), Chapter 3  
Lab report due by Thurs., Feb. 11  
Online (Connect) homework, Week 4 | Week 3 HW:  
Tues., 9-Feb |
|      | 12 – Feb   | Monatomic & Polyatomic Ions; Naming Acids and Bases                             | 2.7; pp. 58–61, pp. 64–66 |                                                             |                       |
| 5    | 17 – Feb   | Ionic Bonding & Electronegativity                                              | 9.1 – 9.2; pp. 367–370 9.4 – 9.5; pp. 375–380 | L4: Ionic and Covalent Bonding & the Periodic Table, Chapter 4  
Lab report due by Mon., Feb. 21!  
Online (Connect) homework, Week 5 | Week 4 HW:  
Tues., 16-Feb  
Online Exam 1 (Wks. 1–4): Thu. 18-Feb (see p.6) |
|      | 19 – Feb   | Covalent Bonding; How to Draw Lewis Structures                                  | 9.6; pp. 381–384 |                                                             |                       |
|      |            | **Reading day; recorded lecture for asynchronous learning**                   |                     |                                                             |                       |

* To accommodate any potential disruptions, HW submission windows will remain open one week past the due date (11:59 pm EDT). But don’t fall behind!
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture Topic</th>
<th>Reading (Textbook)</th>
<th>Online lab / HW activities (Top Hat / Connect / BrightSpace)</th>
<th>Exams &amp; HW due dates*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26 –Feb</td>
<td>Molecular Shape &amp; Polarity</td>
<td>10.1; pp. 411–420</td>
<td>Lab report due by Thurs., Feb. 25</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10.2; pp. 421–426</td>
<td>Online (Connect) homework, Week 6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>03 –Mar</td>
<td>Atomic &amp; Molecular Mass; Avogadro’s Number</td>
<td>3.1 – 3.3; pp. 79–86</td>
<td>L6: Molecular Geometry and Polarity (Part II), Chapter 6</td>
<td>Week 6 HW: Tues. 02-Mar.</td>
</tr>
<tr>
<td></td>
<td>05 –Mar</td>
<td>Moles and Molar Mass; Percent Composition by Mass</td>
<td>3.5; pp. 88–91 (also see p. 518)</td>
<td>Lab report due by Thurs., Mar. 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Online (Connect) homework, Week 7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>10 –Mar</td>
<td>Solution Concentration &amp; Molarity; Dilution Factors</td>
<td>4.5; pp. 147–151</td>
<td>L7: Measuring Moles, Chapter 7</td>
<td>Week 7 HW: Tues. 09-Mar.</td>
</tr>
<tr>
<td></td>
<td>12 –Mar</td>
<td>Solutions of Acid, Bases, &amp; Electrolytes</td>
<td>4.1, 4.3; pp. 122–124; pp. 130–135</td>
<td>Lab report due by Thurs., Mar. 11</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Online (Connect) homework, Week 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>19 –Mar</td>
<td>Acid–Base Reactions; Precipitation &amp; Ion-Exchange Reactions</td>
<td>4.3; (review) pp. 125–129</td>
<td></td>
<td>Online Exam II (Wks. 5–8): Wed. 17-Mar (see p.6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.7; Lab Manual pp. 153–156</td>
<td>Online (Connect) homework, Week 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>02 –Apr</td>
<td>Workshop II: Converting Reactants to Products (Chapter 4 review)</td>
<td>(Mole Highway II handout; Worksheet II)</td>
<td>Lab report due by Thurs., Apr. 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Online (Connect) homework, Week 11</td>
<td></td>
</tr>
</tbody>
</table>

* To accommodate any potential disruptions, HW submission windows will remain open one week past the due date (11:59 pm EDT). But don’t fall behind!
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture Topic</th>
<th>Reading (Textbook)</th>
<th>Online lab / HW activities (Top Hat / Connect / BrightSpace)</th>
<th>Exams &amp; HW due dates*</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>07 –Apr</td>
<td>Review for Exam III</td>
<td></td>
<td>L10: Techniques to Determine Concentration (Part I: Spectroscopy) Chapter 10</td>
<td>Week 11 HW: Tues. 6-Apr.</td>
</tr>
<tr>
<td></td>
<td>09 –Apr</td>
<td>Energy Changes in Reactions</td>
<td>6.1; pp. 231–234</td>
<td>Lab report due by Thurs., Apr. 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Online (Connect) homework, Week 12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16 –Apr</td>
<td>Specific Heat &amp; Calorimetry</td>
<td>6.5; pp. 249–252</td>
<td>Online (Connect) homework, Week 13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>23 –Apr</td>
<td>Percent Yield</td>
<td>3.10; pp. 106–109</td>
<td>Online (Connect) homework, Week 14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30 –Apr</td>
<td>Final Review</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>** Finals Week: May 3 – May 8 **</td>
<td></td>
<td></td>
<td>Online Final:*** Date and Time TBA</td>
</tr>
</tbody>
</table>

* To accommodate any potential disruptions, HW submission windows will remain open one week past the due date (11:59 pm EDT). But don’t fall behind!

** Hourly Exam 3 will emphasize weeks 9, 10, and 11.

*** Final exam will be comprehensive, but weighted toward weeks 12, 13, and 14.