Chemistry 11200 is a foundational general chemistry course for agriculture, health and human science, and other majors. The minimum prerequisite for CHM 11200 is credit for CHM 11100. The course is oriented around helping you learn some of the fundamental chemistry concepts, calculations, and laboratory skills you need in your major.

In CHM 11200, General Chemistry II, the following topics will be covered:

- Intermolecular forces (IMF) with an emphasis on understanding IMF at the molecular level and connections between the molecular level and macroscopic properties such as boiling point or surface tension; solutions and their physical properties.

- Acids, bases, and buffers. Many disciplines use these concepts and chemists have developed different kinds of models to describe acids and bases. You will learn and use three different models. We will focus on acid-base reactions, equilibria, and the application of quantitative equilibrium concepts to such reactions. Buffers have important applications in agriculture and in health sciences that will be explored in lecture and laboratory.

- Rates of chemical reactions, known as kinetics, and the quantitative application of zero-order, first-order, and second-order kinetics concepts to understand the factors that control rates of reaction and rates of chemical change.

- Oxidation-reduction reactions, strengths of oxidizing and reducing agents.

- A brief overview of organic compounds and biologically important molecules.

There are two lecture sections of CHM 11200 taught by Professors Towns and Harwood. There are approximately 20 graduate teaching assistants who teach laboratory and recitation sections.

The Chemistry 11200 team—the professor, lecture and laboratory coordinators, graduate teaching assistants, administrative assistants, general chemistry preparations lab, and SI leaders—are committed to and focused on helping you learn chemistry. Please read on to learn about the required materials, lecture and lab schedule, recommended ways to study, lab policies, grading, and other course policies and procedures.

BRWN 1144, The General Chemistry Office, 49-45250 The General Chemistry office handles all the administrative details associated with the course. Any non-chemistry questions about the course can be directed to this office. For example, go to BRWN 1144 to get grade checks, to discuss exam conflicts, to get clarification on course policies, to resolve grade issues, to change your schedule (during weeks 2 and 3 only), and to obtain signatures on university forms such as add/drop forms. Instructional specialist Mrs. Miller and assistants Mrs. Linn and Mrs. Roadruck are able to help you with a variety of requests so you can maximize your success in general chemistry.
**Lecture and Lab Coordinators:** Ashton Hjerstedt is the lecture coordinator, BRWN 1144, phone: 49-45250, ahjierste@purdue.edu; Kevin Wee is the lab coordinator, BRWN 1144, phone: 49-45250; kwee@purdue.edu. The General Chemistry Office is in BRWN 1144 and the staff in that office can also answer questions for you, or direct them to Dr. Towns and Dr. Harwood.

**Supplemental Instruction:** There are Supplemental Instruction (SI) study sessions available for this course. These study groups are open to anyone enrolled in this course who would like to stay current with and better understand the course material. Attendance at these sessions is voluntary, but extremely beneficial for those who attend regularly. Times and locations for the SI sessions can be found at [www.purdue.edu/si](http://www.purdue.edu/si) or on the BoilerGuide app. A link to the SI website is available on Blackboard. Students who attend these interactive sessions will find themselves working with peers as they compare notes, demonstrate and discuss pertinent problems and concepts, and share study and test-taking strategies. Students should arrive at these informal, peer-led study sessions with their student ID card and lecture notes, if desired.

The SI leaders this semester are Emily Buatois (ebuatois@purdue.edu) and Kayli Decocker (kayli@purdue.edu). Kayli’s SI sessions will be held M and W, in HCRN 1145 (Honors College Residence North), 5:30 pm - 6:20 pm, and Emily’s sessions are T and Th in KRCH 464, 5:30 pm - 6:20 pm. Kayli’s office hour is T 12:00 pm - 1:00 pm, WILY C215, and Emily's office hour is W, 1:00 pm - 2:00 pm, WILY C215.

**Course Information:** Lecture outlines, links to homework assignments, reading assignments, announcements, and other course information are available on the course Blackboard page. [http://www.mycourses.purdue.edu](http://www.mycourses.purdue.edu). It is recommended you visit it often!

**Required Materials**

**Textbook:** The textbook we have chosen for you is Burdge, Chemistry, 4th edition (ISBN: 9781260220810). We have also chosen the McGraw-Hill **Connect** online homework program for our homework platform. When you purchase Connect it includes an electronic copy of the textbook, Burdge, Chemistry, 4th edition (ISBN: 9781260220810). You can purchase Connect from the University bookstores or directly through McGraw-Hill (it’s cheaper directly from McGraw-Hill because the bookstore adds a small markup to the McGraw-Hill price). If you would like a physical textbook (loose-leaf version) as well, you must purchase Connect directly through McGraw-Hill online (ISBN: 9781260221060). If you are using an old book (any edition) you will still need to purchase access to the Connect program and that will automatically include an electronic copy of the text. A link on the course Blackboard page will direct you to the McGraw-Hill site where you can make your purchases. **Students who completed CHM 11100 in Fall 2017 already have the necessary Connect access.**


**i-Clicker:** The i-Clicker response system will be used this semester. Clickers may be purchased outside WTHR 200 during the first two weeks of the semester between 9 am and 3 pm (no credit cards). They are cheaper there than in the bookstores.

**Calculator:** A simple battery operated scientific calculator with exponential, logarithm and square root functions will be needed for exams. Two-line non-programmable calculators are allowed. Alpha-numeric and programmable calculators will NOT be allowed for exams.

**Lab Materials:** The *Chemistry 11200 Laboratory Manual*, a Sharpie™ (black, permanent ink) for marking lab glassware, an electronic storage device for lab data, and approved safety goggles, available at the bookstores, outside WTHR 200 during the first two weeks of classes, or from the storeroom on the 1st or 2nd floor in BRWN.
Week #1 Assignments:

- Purchase required materials (see above).
- Register for your CONNECT account.
- Read all the information in this course packet.
- Read the Reading Assignments and Learning Objectives (on Blackboard).
- Complete the safety certification available on the course Blackboard page with a score of at least 20/25. You will complete your safety certification during lab check-in Week 1. You must complete your safety certification before you can work in lab.
- Attend recitation, lecture, and laboratory check-in.

Weekly Assignments:
(Also refer to the “Some Ways to Study Chemistry” on the course Blackboard page.)

- Attend lecture, recitation, and lab.
- Complete the reading assignment before lecture (see lab/lecture schedule, pp. 10-11).
- Complete your Connect homework assignment (due each Friday at 11:59 pm).
- Prepare for lab: read the relevant lab manual chapter, do the textbook reading assignment for lab (see lab/lecture schedule), and complete the pre-lab exercises including the lab procedure outline.

Overview of CHM 11200 Activities and Policies

***For more detailed information, see the course Blackboard page. ***

Reading
See the lecture schedule for the reading assignments. Reading the assigned material prior to lecture and laboratory is recommended. Some of the material will be covered in lecture and some on your own.

Lectures
Student versions of the lecture notes will be posted on Blackboard prior to each lecture. These are not verbatim copies of the lectures, but are outlines of the lectures. Audio recordings and video capture of lecture slides can be downloaded through the Boilercast link on the course Blackboard site.

Cell phones, computers, iPods or other electronic devices not being used for instruction purposes are distracting for everyone in a learning situation. Please respect your classmates and turn off your cell phones and iPods in lectures as well as in recitations and labs. Computers can be used to take notes and follow lecture, but you should not be using Facebook, i-Chat, SnapChat, Instagram, etc. during class. Talking out loud to classmates during lecture is distracting to other students and is disrespectful to the lecturer and your classmates. If you have a question please ask, but otherwise remain quiet and allow the students around you the opportunity to learn.

Recitation
Your teaching assistant conducts a weekly recitation designed to help you understand laboratory that week and to discuss any questions you may have from lecture or the homework. Worksheets containing relevant conceptual and numerical questions will be provided each week. Your teaching assistant will facilitate group discussions over these problems. You will have time to ask questions and check your homework and pre-lab answers so take your homework questions and lab manual with you to recitation.
Homework (CONNECT) and LearnSmart
Each week you will have an online homework assignment in CONNECT which will consist of required questions and possibly optional questions. Required questions will contribute to your homework point total, while optional questions will not. However, optional questions and tutorials can be used to help understand how to work problems or to practice and review for exams. A few homework problems often appear as questions on exams.

Deadlines for completing the on-line assignments will be listed on the online CONNECT Assignment page. Homework will usually be available on Monday mornings and due on Fridays at 11:59 pm, 11 days after it is assigned. You will have a maximum of three attempts to complete each homework question before the listed due date. Homework will be scored and recorded on-line and there is no hand grading or regrading of homework.

LearnSmart modules help you prepare for and learn the material. They are coordinated to go with the material at the time we are learning it. When they are assigned they will be due on Fridays at 11:59 PM.

No time extensions are possible for homework or LearnSmart assignments.

Laboratory
Laboratory exercises are an integral part of CHM 11200 and are an opportunity for you to experience, in a hands-on way, the chemical concepts discussed in lecture.

- Lab attendance is required since CHM 11200 is a laboratory course. There are no make-up labs or excused absences. Scores for approved GAPS or MAPS absences will be prorated. Contact the lecture coordinator for more information.
- You are required to complete 10 of the 12 scheduled lab projects to pass the course. If you fail to complete three or more lab projects, an automatic grade of “F” will be assigned for the course at the end of the semester. The bottom line is that if you miss three or more labs for any reason you’ll earn an F in the course.
- You must complete the online safety certification found on Blackboard with a minimum score of 20/25 by 11:59 pm on Sunday, January 14, 2018. If you do not complete the required safety certification you will not be allowed to work in lab and you will receive a zero for each lab missed until the certification is completed. If you fail to complete three or more labs you will fail the course.
- Follow all lab safety regulations (see below).
- Before lab, read the experiment and attend recitation to help you prepare.
- Complete the pre-lab exercises and prepare an experimental procedure in your lab notebook before coming to lab. Pre-labs are due at the beginning of the lab period.
- Arrive on time, properly dressed, and prepared for lab work.

Appropriate Clothing  Chemistry department regulations state that you must wear clothing in the lab that protects your skin from your neck to your ankles and feet when you are sitting, standing or reaching. Shoes that cover your feet entirely are required. The best option for chemistry lab attire is a t-shirt, jeans without holes, and sneakers with socks. If you attend lab in unacceptable attire, you will be sent home and receive a zero for the lab. This counts as a “fail to complete” lab.
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
- 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
- skirts (unless they extend to the floor)
- open-toed and/or open-heeled shoes (including Crocs, Birkenstocks or other clogs)
- sandals (with or without socks)
- boat shoes, ballet flats, slippers, moccasins, or any shoe that doesn’t cover the entire top of your foot, with or without socks

Laboratory policies

- You will be sharing the equipment in your laboratory drawer with students in other sections of CHM 11200. Students in CHM 11200 have a history of functioning as a responsible community. Thus, we decided to make this course the trial run for using common laboratory equipment. We will depend upon your commitment to keeping the equipment clean and in good working condition. We also will be requesting your feedback midway through the semester and at the end to obtain your perspective of how it is working and how it can be improved.
  - It is important that you do your part to maintain the drawer throughout the semester by cleaning all the pieces of equipment after use by washing with hot water, soap, and a brush, rinse with tap water, then rinse with deionized water (it’s a 3-step process to get the glassware clean and you will have better experimental results with clean glassware).
  - If you are responsible for a piece of equipment becoming un-useable i.e. the piece becomes chipped, cracked, stained, broken, etc., you must go to the storeroom (immediately) and purchase a replacement.
  - Should you discover that a piece of equipment is missing, first check with the other students in your row and the lost and found box. If the piece is still missing please contact the personnel in the storeroom immediately. Bring your PUID. The storeroom personnel will scan your ID, but will not charge you.
  - Finally, we will be using a university lock all semester on the drawer (you don’t need an individual lock). Your TA will open the drawer before lab. Also note that you can’t store personal items in the drawer – keep your goggles, flash drives, and Sharpie™ in your own backpack not the shared drawer!
• If you arrive at lab more than 10 minutes late or improperly dressed, will be asked to leave the lab and will receive a score of zero. This counts as one of your “fail to complete” labs.

• Endeavor to work as an effective member of the team.

• Complete the lab report appropriately:
  o Use pen and write neatly.
  o Label graphs and tables.
  o Use the data you collected for the calculations and analysis.
  o Use correct units of measurement and significant figures.
  o Use chemical terms and concepts correctly.
  o Ensure results and conclusions are consistent with your data and observations.

• Lab reports are due before leaving lab the day lab work is completed and the lab is closed, that is 10:20 am, 2:20 pm or 5:40 pm. Submission of a completed lab report is required for you to receive a grade for the lab.

• Graded lab reports will be returned one week after they are submitted. If you have questions about your grade, speak with your lab instructor or the lab coordinator.

• Academic integrity is a key issue in lab and we support and affirm the academic integrity policies of Purdue in accordance with the policies and definitions outlined at the link below. If you are suspected of an integrity issue you will be asked to meet with the course professors and graduate teaching assistant in charge of laboratory. Either during or after the meeting the consequences will be communicated to you. These consequences may include receiving a zero on the pre-lab or laboratory, contacting your advisor or program coordinator, and/or being reported to the Office of the Dean of Students for further discussions about academic integrity at Purdue. We strongly encourage you to be careful in guarding your own academic integrity and protecting your work! Sharing your work or stealing work of any student, past or present, by taking pictures of it and sharing it through a website or app (texting, groupme, etc.) is not appropriate and will result in disciplinary action. http://www.purdue.edu/odos/osrr/academic-integrity/index.html

Safety
Students' safety in the laboratory is a priority and everyone is required to comply with the following safety regulations. These are departmental policies required because of federal regulations.

• Proper dress (clothing and shoes) and goggles are required. Refer to the detailed information on the course Blackboard page or on the previous page for what constitutes proper dress for the laboratory.

• Wear gloves when specified. Nitrile (non-latex) gloves are provided in the laboratory.

• Food and beverages are never allowed in the labs. Leave your water bottle or thermos with your backpack.

• 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.

• 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.
Exams
Exams are a chance for you to demonstrate your comprehension of the course material and are worth approximately 56% of your final grade. Your lowest exam score or ½ your final exam score will be dropped at the end of the semester.

Spring 2018 hourly exam schedule:

<table>
<thead>
<tr>
<th>Exam</th>
<th>Date</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam I</td>
<td>Thursday, February 1, 2018</td>
<td>8:00-9:00 p.m.</td>
<td>Elliott Hall of Music</td>
</tr>
<tr>
<td>Exam II</td>
<td>Thursday, March 8, 2018</td>
<td>8:00-9:00 p.m.</td>
<td>Elliott Hall of Music</td>
</tr>
<tr>
<td>Exam III</td>
<td>Tuesday, April 10, 2018</td>
<td>8:00-9:00 p.m.</td>
<td>Elliott Hall of Music</td>
</tr>
</tbody>
</table>

Final Exam: time and place to be announced – see below

- Attendance at exams is required. There are NO make-up exams and absences are not excused. If you are absent for one exam, your score will appear as a zero until the end of the semester, at which time one zero score can be dropped. You will receive no score (zero points) for additional missed exams.
- Scores for approved GAPS/MAPS absences will be handled individually. Contact the lecture coordinator or Dr. Towns or Dr. Harwood for more information.
- If you have a direct conflict with another exam, class, or required university activity, contact the General Chemistry office (BRWN 1144) at least one week before the conflict. You will be asked to provide written verification of the 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 one of the exams, the student will contact the Office of the Registrar; the Registrar 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.
- Hour exams are one hour (60 minutes) in length. You should arrive at least 15-20 minutes before the exam start time. If you arrive more than 15 minutes after the exam begins, you will not be allowed to take the exam.
- Exams are given in the Elliott Hall of Music. Before Exam I, you will receive an exam seat assignment for the entire semester. Take your PUID, your seat assignment, an appropriate calculator (see details on the front page), and #2 lead pencils with you to the exam and plan to arrive 20 minutes before the exam begins. You may not share a calculator with another student.
- Regrade policy for exams with free response items:
  o Deadline: If the exam is handed back in lab, then you must turn in your regrade request accompanied by a regrade request form available in the general chemistry office (Brown 1144) by the end of your lab period. Staple the regrade request form to the front cover of your exam and hand it in to Brown 1144. Note that the regrade procedure is intended to correct for serious errors in grading. If there was an arithmetic error in adding up points, simply note the error on the front of the exam and turn it in to Brown 1144 – this is not a regrade request, it is a score adjustment.
  o Any indication that a regrade has been requested for a modified exam (meaning the exam was modified after it was graded and has been turned in for a regrade) will be considered a breach of academic integrity and will be reported to the Office of the Dean of Students. The student will automatically fail the course. Note that a random sample of the examinations have been scanned or photocopied before they have been returned.
  o What merits a regrade
    - Your answer is the same as the one on the key, but the grader didn’t realize it. Your explanation should make it clear why you believe your answer is the same!
    - Your answer is different from the one provided on the answer key, but your answer is also correct. Your explanation should make it clear that you have read the answer key, and why you think your answer is also correct.
**Final Exam**
- The final exam is a 2-hour comprehensive exam. The time and place for the final exam will be announced by the university mid-semester.

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

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

**Determining your Course Grade, Spring 2018**
Each of the assigned course activities for CHM 11200 is worth the number of points listed below. Before course grades are finalized at the end of the semester the following scores will be dropped:

- your lowest homework score
- your lowest lab score
- your lowest exam score or ½ your final exam score, whichever is lower

The total number of points for CHM 11200 will be distributed as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>150pts (Connect Homework at 90 pts plus LearnSmart chapters at 60 pts)</td>
</tr>
<tr>
<td>Labs</td>
<td>275pts (best 11 of 12 at 25 pts each)</td>
</tr>
<tr>
<td>Badges</td>
<td>15pts (3 at 5 pts each)</td>
</tr>
<tr>
<td>Exams</td>
<td>420pts (3 at 140 pts each)</td>
</tr>
<tr>
<td>Final Exam</td>
<td>280pts (comprehensive)</td>
</tr>
<tr>
<td>Sub-total</td>
<td>1,140pts</td>
</tr>
<tr>
<td>Drop</td>
<td>-140pts (drop lowest exam score or ½ final exam score, whichever is less)</td>
</tr>
<tr>
<td>Total</td>
<td>1,000pts</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 have fail-to-complete scores for 3 or more of the 12 scheduled lab projects (If you miss 3 or more labs, your course grade is automatically an F.)

Save all returned graded papers and your exams until after you have received your course letter grade for CHM 11200. To resolve any discrepancies, your paper(s) will need to be reviewed.

**Extra Credit:** Up to 20 points of extra credit is available during the course by answering clicker questions during class.
Course Activities, Policies and Procedures

Studying Chemistry
Expect to spend at least 6-9 hours per week on chemistry outside of the normal class time. This time includes preparing for lecture, paying attention and taking notes during lecture, reviewing your notes after lecture, and completing homework, reading, and lab assignments.

Sources of Help
There are several free sources of help for CHM 11200 students, including professor office hours, TA office hours, SI sessions with Emily Buatois and Kayli Decocker, and the Chemistry Resource Room, WTHR 117B. Further sources of help can be found on the “Important Purdue Resources Handout” on the Purdue University Foundations of Excellence page at http://www.purdue.edu/foundationsofexcellence/.

Changing Sections/Dropping

Chemistry Department Deadlines – Spring 2018

| Mon. Jan. 16: | LAST day to add chemistry or switch lab sections without instructor approval |
| Fri. Jan. 26: | LAST day to switch lab sections or LAST day to add CHM 11200 (if not enrolled in another CHM course) |
| Fri. Feb. 2: | LAST day to switch from another CHM course to CHM 11200 (subject to instructor approval) |

University Deadlines - Spring 2018

| Mon. Jan. 22: | Last day to cancel (drop) a course in myPurdue, without it appearing on your record. |
| Mon. Feb. 5: | Last day to cancel (drop) a course without a grade. |
| Fri. Mar. 9: | Last day to cancel (drop) a course (with a passing or failing grade). |

Changing Sections: A change in lecture or lab section requires the approval of the course coordinator in BRWN 1144 after the first week of classes. Because of the processes associated with assigned lab drawers and Blackboard and Connect enrollment, we will not make a section change for students after week #3 of the semester. If you change sections after you check into a locker drawer, you must check out of your old locker drawer before checking into a drawer in your new section.

Adding the Course/Late Registration: Students are usually not permitted to add CHM 11200 after week 3 of the semester (Friday, January 26). Notify the course coordinator no later than Friday, January 26 if you register late to see about making up missed assignments.

Dropping the Course: If you drop CHM 11200 after having checked into a lab drawer, it is your responsibility to check out of your assigned drawer during your scheduled lab period. Failure to check out of lab will result in a $45 fee.

Emergencies
In the event of a major campus emergency, course requirement, 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 11200 will be posted on the course Blackboard site or can be obtained by contacting the instructors via email or the General Chemistry office at 765-494-5250.

- “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 outside air, 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 emergency response personnel provide additional guidance or tell you it is safe to leave. There is no “all safe siren;” notification will come via text, internet, or email.
• In the case of a major campus emergency involving a shelter-in-place, all laboratory experiments will be halted while students shelter in lab. Students' lab grades will not be penalized in this situation.

Disability Accommodations
If you require accommodations to access course activities or materials, the accommodations must be described and approved by Disability Resource Center, Young Hall Room 830, 302 Wood Street, 494-1247, www.purdue.edu/drc. To implement accommodations you must follow the instructions listed as “Responsibilities of the Student” in the letter prepared by the Disability Resource Center. Take a copy of this letter to the course coordinator in BRWN 1144 within the first three (3) weeks of the semester or within one week of the date of the letter being written to discuss your accommodations. Timely notification of the course coordinator is critical for timely implementation. Please take your letter to BRWN 1144 so that Mrs. Roadruck can assist you in scheduling your exams.

Academic Integrity Statement and Consequences.
Please read http://www.purdue.edu/odos/osrr/academic-integrity/index.html
We support and affirm the academic integrity of Purdue in accordance with the Purdue Honors Pledge: “As a Boilermaker pursuing academic excellence, I pledge to be honest and true in all that I do. Accountable together – we are Purdue.”

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 (based on your average and the class average). See the Lecture or Lab Course Coordinator for more information.

MAPS Absence Policy for Students (MAPS)
A student should contact the Office of the Dean of Students (ODOS) to request that a notice of the leave be sent to instructors as soon as the student is informed of the dates of mandatory military training. Given proper documentation, the instructor will excuse the student from class and provide the opportunity to earn equivalent credit and to demonstrate evidence of meeting the learning outcomes for missed course work.

Diversity Welcome
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, disabilities, education, ethnicities, family statuses, genders, geographical locations, languages, military experience, political views, races, religions, sexual orientations, socioeconomic statuses, and work experiences. See: http://www.purdue.edu/diversity-inclusion/

University Activities
If you are part of a university sponsored team associated with the athletics department you will receive a letter from your advisor in athletics pertaining to travel for events/contests/matches/games that may result in conflicts or absences. Take a copy of this letter to the course coordinator in BRWN 1144 within the first three (3) weeks of the semester or within one week of the date of the letter being written to discuss your accommodations. Timely notification of your professor and the course coordinator is critical to discuss the impact of any absence or conflict on your performance in the course.

Other Absences
If you are absent for other reasons, including illness, family emergencies, hospitalization, or university activities, you can ensure your professors are informed by notifying the Office of the Dean of Students at 765-494-1747. Any missed assignments due to such absences will most likely not be excused. See the Professor, Lecture or Lab Course Coordinator for more information.

For details about other Purdue University policies, including academic integrity, class attendance and absence reporting, emergency, nondiscrimination, and disability services, see the course Blackboard site.

***For more information on the topics in this course summary, please see the course Blackboard page. ***
# Proposed Lecture Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture Topic</th>
<th>Reading (textbook)</th>
<th>Laboratory (T, W) (laboratory manual)</th>
<th>Exams (location)</th>
<th>Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9-Jan</td>
<td>Introduction</td>
<td></td>
<td>Check-In Safety Certification (Blackboard)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>11-Jan</td>
<td>Intermolecular Forces</td>
<td>11.1: pp 483-490</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>16-Jan</td>
<td>Intermolecular Forces; Properties of Liquids</td>
<td>11.2: pp 490-495</td>
<td>L1: Chromatography of Amino Acids (Ch 1) (Lab notebook, splash goggles, and proper clothes for lab work are required.)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>23-Jan</td>
<td>Properties of Solutions</td>
<td>13.4-13.5: pp 573-587</td>
<td>L2: Biologically Important Molecules: Isolation of DNA from Fruit (Ch 12)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>25-Jan</td>
<td>Colloids; Phase Changes</td>
<td>13.7: pp 590-592; 11.6: pp 509-514</td>
<td></td>
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<td>4</td>
<td>30-Jan</td>
<td>Acids and Bases (models)</td>
<td>16.1-16.3: pp 719-725</td>
<td>L3: Antacid analysis (Ch 2)</td>
<td>Exam I Thursday, 02/01/18 8:00 pm ELLT</td>
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<td>01-Feb</td>
<td>Acids and Bases (drawing Lewis Structures)</td>
<td>16.3-16.4: pp 725-734</td>
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<td>5</td>
<td>06-Feb</td>
<td>Acids and Bases - pH</td>
<td>16.5-16.6: pp 735-746</td>
<td>L4: Describing Acids (Ch 5)</td>
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<td>08-Feb</td>
<td>Equilibria &amp; Weak Acids and Bases</td>
<td>16.7: pp 746-749</td>
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<td>13-Feb</td>
<td>Weak Acids &amp; Bases; Polyprotic Acids; Acid Strength; Salt Solutions</td>
<td>16.8-16.10: pp 750-761</td>
<td>L5: Acid Base Titrations (Ch 6)</td>
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<td>20-Feb</td>
<td>Buffers</td>
<td>17.2: pp 782-785</td>
<td>L6: Synthesis of Luminol (Ch 11)</td>
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<td>22-Feb</td>
<td>Buffers</td>
<td>17.2: pp 782-785</td>
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<td>27-Feb</td>
<td>Lewis Acids/Bases; Buffers</td>
<td>16.12: pp 763-765 Handout in class</td>
<td>L7: Preparation of Buffers and Determination of Buffer Capacity (Ch 7)</td>
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<td>01-Mar</td>
<td>Lewis Acids/Bases; Buffers</td>
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<td>Week</td>
<td>Date</td>
<td>Lecture Topic</td>
<td>Reading (textbook)</td>
<td>Laboratory (M, T, W) (laboratory manual)</td>
<td>Exams (location)</td>
<td>Week</td>
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<td>9</td>
<td>06-Mar</td>
<td>Review Exam 2</td>
<td></td>
<td>NO LAB <em>(Time compensation for evening exams.)</em></td>
<td>Exam II</td>
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<td>08-Mar</td>
<td>Lewis Acids/Bases &amp; Buffers</td>
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<td>Thursday, 03/08/18 8:00 pm ELLT</td>
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<td>20-Mar</td>
<td>Kinetics</td>
<td>14.1: pp 607-615</td>
<td>L8: Factors Affecting Rates of Reactions (Ch 3)</td>
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<td>Kinetics</td>
<td>14.2: pp 615-620</td>
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<td>27-Mar</td>
<td>Kinetics</td>
<td>14.3-14.4: pp 620-630</td>
<td>L9: Chemical Kinetics: De-colorization of Crystal Violet (Ch 4)</td>
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<td>29-Mar</td>
<td>Kinetics</td>
<td>14.5-14.6: pp 635-647</td>
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<td>03-Apr</td>
<td>Redox</td>
<td>4.4: pp 144-148</td>
<td>L10: How Much Copper is in a Penny (Ch 8)</td>
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<td>05-Apr</td>
<td>Redox</td>
<td>19.1: pp 877-880</td>
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<td>19.1: pp 877-880</td>
<td>L11: Iron Deficiency Analysis (Ch 9)</td>
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<td>12-Apr</td>
<td>Redox</td>
<td>Handout</td>
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<td>19-Apr</td>
<td>Organic Chemistry</td>
<td>25.3-25.4: pp 1076-1083; 1096-1097</td>
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<td>15</td>
<td>24-Apr</td>
<td>Biochemistry</td>
<td>25.6: pp 1098-1101</td>
<td>---CHECK OUT--- <em>Proper lab dress and splash goggles are required.</em></td>
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<td>26-Apr</td>
<td>Review</td>
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<td>16</td>
<td>30-Apr</td>
<td>Final Exams Begin</td>
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<td>Final Exam TBA</td>
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<td>05-May</td>
<td>Final Exams End Saturday Evening</td>
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