

Course syllabus
Chem 121A – General Chemistry
Summer 2023

1. Course Information

Instructor: Elizabeth Walenta

Lecture: DMS M-F 9:00 – 12:00

Lab: DMS 410; M-F 2:00 – 5:00

Course Website: WebCampus

1.1 Course Description

CHEM 121A lecture is designed for first- semester general chemistry students whose academic plans require advanced study in chemistry. Fundamentals of chemistry including reaction stoichiometry, atomic structure, and chemical bonding, and molecular structure, states of matter, intermolecular forces, solutions, and thermochemistry will be covered.

Prerequisite: Completion of Core Curriculum Mathematics requirement (Pre-Calculus or higher recommended)

Corequisite: CHEM 121-L (This is the laboratory portion of CHEM 121A)

1.2 Student Learning Outcomes

Throughout and upon completion of the course, students will take personal responsibility for their learning and academic success. The following are Student Learning Outcomes (SLOs), which every student may achieve by the completion of the course:

- Appraise and assess how chemistry applies to everyday phenomena.
- Identify salts, acids, and bases from their molecular formulas, and describe the relationship between the structure of a molecule and its chemical and physical properties.
- Identify the subatomic particles of an atom, their charges and relative masses.
- Balance chemical equations and compute stoichiometric relationships including limiting reagents, molarity, titrations, dilutions and thermochemical equations.
- Predict periodic trends in atomic and ionic size, ionization potential and electronegativity.
- Draw Lewis structures for p-block molecules and their three dimensional representation.
- Use the ideal gas law to calculate pressure, volume, and temperature relationships.
- Explain various intermolecular forces within a chemical system and how they apply to colligative properties.

1.3 Course Materials

- Textbook: Textbooks and lab materials are purchased and provided to students by the THINK program
- Nonprogrammable/non-graphing scientific calculator (able to perform logarithms, exponentials, and scientific notation).

1.4 Course Website: WebCampus

The course website on WebCampus will be where announcements, assignments, grades, study guides and supplemental information can be found. Please note: Webcampus may not be used to access the modified MasteringChemistry homework system.

2. Course Evaluation

2.1 Point Distribution

Three Exams (100pts each)	38%	(300 pts)
Final Exam	25%	(200 pts)
Online Homework	25%	(200 pts)
In class assignments	13%	(100 pts)

2.2 Grading Scale

The table below shows the grading scale for the lecture course.

Letter Grade	Percent of Points Earned out of points possible
A	100 – 93
A-	92 – 90
B+	89 – 87
B	86 – 83
B-	82 – 80
C+	79 – 77
C	76 – 73
C-	72 – 70
D+	69 – 67
D	66 – 63
D-	62 – 60
F	59 or below

2.3 Exams

There will be three in class exams (worth 100 pts each) and a final exam (worth 200 points). The final exam will be comprehensive, covering the entire course, with new material presented after the third in class exam. Exams will be multiple choice, with a few free response questions at the end. Only non-programmable calculators will be allowed during the exams. Scientific calculators may be provided, however; students are responsible for knowing how to work with the operations and features of the calculator. Cell phones are not to be used as calculators. Calculators may NOT be shared during the exam. Failure to follow these instructions will result in zero points for the exam. Make up exams will not be given for any reason. If an exam is to be missed and if the student submits valid documentation proving the absence is excusable, the percentage grade from that portion of the final exam will be substituted for the missed exam. The above "excused absence" policy may only be used once.

The cumulative final exam is required for completion of this course. The final exam will consist of multiple choice questions divided into four sections: the first 3 sections will consist of questions that are representative of the content from each of the three hour exams, and the fourth section will contain questions on material covered after Exam 3. The final breakdown of number of questions per section will be announced prior to the final exam.

2.4 Online Homework

Online Homework is a mandatory component of the course, allowing the student to earn points towards their final grade. The homework system used in Chem 121A is the modified mastering chemistry, accessed through the Webcampus/Canvas website. Initial access must be done through the Webcampus/Canvas link, access after that can be done directly through the Mastering Chemistry website.

Homework will be divided into 3 sets each containing multiple chapters. Homework sets will be due each Thursday by 11:59pm. The questions are meant to reinforce material covered in the lecture and help prepare for exams.

Please note that the MasteringChemistry system can be very particular about how answers are registered. The Introduction to MasteringChemistry and Chemistry Primer will NOT be graded but it is strongly recommended you take time to become familiar with the system.

2.5 Lectures

There is a significant amount of material that must be covered before the end of the semester, making a fairly rapid pace unavoidable. I will use PowerPoint slides which will come directly from the textbook. This material will also be made available on WebCampus so students should not feel as though they need to copy notes from the lecture.

2.6 In class assignments

Throughout the course, there will be a series of in class assignments. The points earned from these activities will be to look at student process and work. Dimensional analysis, stoichiometry, significant figures, and writing equations will be looked at for logic and completeness. Work done on these assignments will focus more on showing the process with units rather than on correctness.

3. ChemHelp Center

A chemistry specific tutoring center is available for you to seek lecture and laboratory help. It is located in the Pennington Student Achievement Center (PSAC), Room 320. The hours and schedule can be found at <http://www.unr.edu/chemistry/chemistry-help-center>. The staff will be available to assist with homework questions (MasteringChemistry), reviewing concepts, and working through practice problems. **They will not do your homework for you. They are not there to troubleshoot your online homework issues either.** Using the ChemHelp Center early will greatly increase your chances of being successful in this course. No appointments are necessary; walk-ins only. You must sign-in before entering the room.

4. Communication Guidelines and Classroom Decorum

The following is a list of expectations in and out of the classroom to enhance the learning environment for you and students around you.

- All electronic devices in use must be utilized to support course work.
 - o Any computers and/or tablets must be used only for lecture purposes (e.g. note taking).
 - o During lecture, talking on a phone, emailing, texting, IM'ing, browsing the internet, engaging in social media, playing games, and/or watching videos will not be tolerated. If you are caught doing these things you will be asked to leave.
- Do not talk to others during lecture.
- Do not read non-course related materials or do homework for a different course.
- Do not sleep during lecture.
- Except in the case of an emergency, remain seated in the lecture hall. If it is necessary to leave or enter a room once class has begun, do so quietly and with as little disruption as possible.
- Please raise your hand if you have a general question and do not interrupt another student's question.
- If you violate one of these expectations, you will be asked to leave the lecture hall immediately. Multiple offenses will be reported to the office of student conduct

Please be considerate of your fellow students in the classroom. Everyone is trying to learn and keep pace with the material.

I highly encourage students to ask questions if they have them. I will answer them as best I can in the lecture setting. That being said, please know that we do have a lot of material to cover and that some questions cannot be answered in a simple exchange. In these cases I am more than happy to spend a few minutes after class or during office hours answering more complicated questions.

5. Email Etiquette

Emails sent to any staff or faculty should be written as and thought of as a professional (business) email. Therefore, the following guidelines should be followed:

1. Include the course information in the subject line (Please include the course name and section number, e.g. "CHEM 121A 1003").
2. Include a salutation (e.g. Dr., Prof., etc.).
3. Write complete sentences (e.g. an independent clause with a subject noun phrase and a finite verb).
4. Do not use "texting English." (Emails that read like text messages using jargon abbreviations, incomplete sentences, incomplete words, etc. will be considered a foreign language.)
5. Put a blank line between paragraphs. (The faster I can determine what you are saying /asking in your email, the faster I can respond.)
6. Conclude the email with your first and last name (so I know whom to address my response. I suggest setting up an auto-signature on your email server.)
7. Do not include your NSHE ID number or your Social Security number. (State university emails are considered public domain)
8. Do not ask how to answer a homework/lecture question. (I will answer any questions you have regarding chemistry in person. Therefore, come to office hours, visit the ChemHelp Center, or email me to setup an appointment.)

9. Do not ask about your course grade. Due to the federal law, the Family Educational Rights and Privacy Act (FERPA) of the U.S. Congress, I cannot comment on, communicate, or acknowledge your grade via email or telephone. (This is to protect your privacy as a student)
10. Do not send an email asking for class notes or general information that can be obtained from WebCT or from other classmates.
11. Use the same format (salutation, complete sentences, concluding with your name) listed above for all replies. (Just because you are replying to an email does not mean you can stop using proper email formatting.)
12. Please be patient; do not expect an immediate response. Allow up to two business days for a response to your email. I do not work on the weekends.
13. If you fail to follow these guidelines, you may not receive a reply.

6. University Policies

6.1 Academic Dishonesty

Your continued enrollment in the course implies that you have read and are familiar with the Student Code of Conduct and Policies of the University Nevada, Reno. The following definitions and possible courses of action concerning academic dishonesty are taken from Section 8.3 of the University Catalog and can be found online at: <http://catalog.unr.edu/>

Academic dishonesty is against university as well as the system community standards. Academic dishonesty is defined as: cheating, plagiarism or otherwise obtaining grades under false pretenses. Plagiarism is defined as submitting the language, ideas, thoughts or work of another as one's own; or assisting in the act of plagiarism by allowing one's work to be used in this fashion. Cheating is defined as (1) obtaining or providing unauthorized information during an examination through verbal, visual or unauthorized use of books, notes, text and other materials; (2) obtaining or providing information concerning all or part of an examination prior to that examination; (3) taking an examination for another student, or arranging for another person to take an exam in one's place; (4) altering or changing test answers after submittal for grading, degrades, after grades have been awarded, or other academic records once these are official.

Any form of academic dishonesty will not be tolerated in this class. Disciplinary procedures for incidents of academic dishonesty may involve both academic action and administrative action for behavior against the campus regulations for student conduct. The minimum penalty for academic dishonesty is an F in the course. A student found responsible for violating this policy may not withdraw from the course in question. A student failed in a course due to academic dishonesty may not utilize the "repeat option" for that course. See the Student Handbook and UNR Catalog for rules about and sanctions for academic dishonesty.

6.2 Students with Disabilities Act

The Department of Chemistry and the University of Nevada, Reno support providing equal access for students with disabilities. Any student with a disability needing academic adjustments or accommodations is requested to speak with me or the Disability Resource Center as soon as

possible to arrange for appropriate accommodations. The contact information for the Disability Resource Center is:

Disability Resource Center

Thompson Building, Suite 100.

Phone: 775-784-6000

Website: <http://www.unr.edu/drc>

6.3 Academic Success Services

Your student fees cover usage of the Math Center (784-4433 or <http://www.unr.edu/mathcenter/>), Tutoring Center (784-6801 or <http://www.unr.edu/tutoring-center/>), and University Writing Center (784-6030 or <http://www.unr.edu/writing-center/>). These centers support your classroom learning; it is your responsibility to take advantage of their services.

6.4 Surreptitious and Covert Video and Audio Recording

Surreptitious or covert video-taping of class or unauthorized audio recording of class is prohibited by law and by Board of Regents policy. This class may not be videotaped or audio recorded except by the written permission of the instructor. In order to accommodate students with disabilities, some students may have been given permission to record class lectures and discussion. Therefore, students should understand that their comments during class may also be recorded.

7. Tips for Success

- Don't get behind. We will be covering a large amount of material quickly. Many will likely find the first few weeks easy, however; the material will rapidly become more difficult. As concepts build upon earlier material, it is vital that you thoroughly understand material from the beginning of the course.
- Learn as you go. The key to success in chemistry is to spread out your learning throughout the entire semester. Taking time to learn the concepts as they are taught will drastically reduce the time needed to study immediately before the exams. If done correctly, the night immediately before the exam should be some of the "lightest" studying – requiring only review of more troublesome concepts or topics.
- Learn the concepts behind the material rather than memorizing each fact or problem. General chemistry is heavily math and application based with too many types of problems to reliably depend on memorization.
- Practicing the material is the key to success. Working problems helps to reinforce concepts and test understanding of the material.
- Do NOT rely on memorization. Chemistry is a complex subject that takes time to learn and apply the concepts. Most individuals cannot succeed by merely cramming and memorizing material immediately before the exam.
- Actively study: pay attention during class, work problems, ask questions, and stay up to date / review material regularly.
- Use your resources. See me if you are having difficulty. If you don't understand something, ask me! Additionally, study groups are also very helpful as are the ChemHelpCenter.

- Do the homework. The MC assignments are meant to help you learn the material, study, and earn some points. Leave plenty of time for the assignments so if you have questions or issues there is plenty of time to get help. Quality time spent working on the homework can be considered studying.
- Come to Class! Participate in Class Discussion! Make your learning an active and engaging experience. When you are actively engaged and participating in the content you are more likely to remember the material not just for a day but for a lifetime.

Week	Tentative Dates	Chapter	Mastering Chem.
1	July 10 July 11 July 12 July 13	Syllabus / Ch. 1 Ch. 2 Ch. 3 Ch. 4 / Exam 1	Homework Set 1
2	July 17 July 18 July 19 July 20	Ch. 10 Ch. 5 Ch. 6 Exam2 / Ch. 7	Homework Set 2
3	July 24 July 25 July 26 July 27 July 28	Ch. 7 Ch. 8 / Ch. 9 Exam 3 / Ch. 9 Ch. 11 Final Exam	Homework Set 3

Course Syllabus
CHEM 121L – General Chemistry I Laboratory
Summer 2023

1. Course Information

Teacher: Elizabeth Walenta

1.1 Course Description

This course provides the laboratory component to accompany CHEM 121A (General Chemistry I Lecture) in examining the fundamentals of chemistry including reaction stoichiometry, atomic structure, chemical bonding, molecular structure, states of matter, and thermochemistry.

1.2 Student Learning Outcomes

Throughout and upon completion of the course, students will take personal responsibility for their learning and academic success. The following are Student Learning Outcomes (SLOs), which every student may achieve by the completion of the course:

- Assess and determine the connection between the hands-on laboratory material and the material discussed in the lecture course (CHEM 121A).
- Explain the relationship between the structure of a molecule and its chemical and physical properties.
- Apply knowledge and skill to laboratory techniques, including the proper and safe use and handling of glassware, the techniques and processes common to many scientific labs, standard methods for recording observations and data, performing accurate quantitative measurements.
- Analyze and interpret experimental results, derive chemical properties from experimental data, and develop appropriate and accurate conclusions.
- Articulate and follow ethical principles in the laboratory context.

1.3 Course Materials

→ Textbooks and materials are purchased and provided to students by the THINK program

1.4 Course Website: WebCampus

This course has a WebCampus page, to which you should have access as an enrolled student. The WebCampus page will be used to make announcements and to distribute course materials. You should check this site regularly for updates and information.

2. Course Evaluation

2.1 Laboratory Assignments

The report sheet and post-lab questions for each experiment are due at the beginning of lab the following week. They must be handed in before the pre-lab quizzes or they will be considered late and 25% of the earned points for that lab will be automatically deducted. If the lab report is not turned in at all during the lab period, 50% of the earned points will be deducted and the lab must be handed in the following lab period or the student will receive a zero for that experiment.

2.2 Point Distribution

Prelab Quizzes (10 pts each)	100 points
Lab Reports (30 pts each; Expt. # 7 is 40 pts)	280 points
Final Exam	50 points
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Total Points	430 points

2.3 Tentative Grading Scale

The follow table shows the *tentative* grading scale for the lecture course.

Letter Grade	Percent of Points Earned out of Points Possible
A	100 – 89 %
B+ to B–	88 – 79 %
C+ to C–	78 – 61 %
D+ to D–	60 – 50 %
F	< 50 %

2.4 ChemHelp Center

A chemistry specific tutoring center is available for you to seek lecture and laboratory help. It is located in the Pennington Student Achievement Center (PSAC), Room 320. The hours and schedule can be found at <http://www.unr.edu/chemistry/chemistry-help-center>. The staff will be available to assist with homework questions (MasteringChemistry), reviewing concepts, and working through practice problems. **They will not do your homework for you.** Using the ChemHelp Center early will greatly increase your chances of being successful in this course. No appointments are necessary; walk-ins only. Students must sign-in to use this service.

3. Laboratory Attendance, Safety, Behavior, and Attire

3.1 Laboratory Attendance

- Laboratory attendance is mandatory.
- **There are no make-up labs.** If you have an excused absence – you will be given the chance to earn points on the lab report for the experiment you were absent. If you have an unexcused absence, you will receive a score of zero points on your lab report and participation grade for that lab period.

- **More than two missed lab periods will result in failure of the course.** This is true for excused and unexcused absences alike. If you miss three lab periods, you will receive a “F” for your course grade.

3.2 Laboratory Safety

**All students are required to watch the safety videos posted to WebCampus and read the document "Safety Information for Students in Undergraduate Chemistry Laboratory Courses" <http://www.unr.edu/chemistry/degrees/undergraduate-students/lab-safety> (info also found at the front of your lab manual) and take the safety quiz corresponding to this information. You must receive an 80% or better in order to pass the quiz. You are allowed two attempts; you will not be able to participate in lab if this quiz is incomplete. Your teacher will provide more details at the first lab meeting.

- The biggest safety concern that we have in lab is that any lab surface may be contaminated with chemicals. It is easy to pick up chemical contamination on your hands without even realizing it, and then something as simple as absent-mindedly rubbing your eye can result in excruciating pain and permanent damage to the eye. **Always wear goggles in the lab.** Besides protecting your eyes from broken glass or chemical splashes, wearing goggles also prevents absent minded eye rubbing. Make sure you wash your hands before taking off your goggles and before leaving the lab.
- The second biggest safety concern that we have in our laboratories is broken glass. Glass breaks every week. Small pieces may fly through the air (so always wear goggles) and large pieces fall downward. **So, always wear a lab coat and close-toed shoes to lab.** Sandals, clogs, and open-toe shoes are not allowed in lab. You will not be permitted to work in lab without goggles, a lab coat, and close-toed shoes, and you will receive a “zero” for that day's experiment.
- **All students must wear long pants in lab** (Capri pants and skirts are not long pants).
- **DO NOT CLEAN UP BROKEN GLASS.** Tell your instructor and they will dispose of it.
- On the first day of lab, your TA will show you around the lab and point out various pieces of safety equipment, which include a safety shower, eyewash fountain, and fire extinguishers. Make sure you know the location of the nearest emergency exits. **In the event of an accident, do not panic. Call your instructor immediately for assistance. He or she will help you resolve the situation.**
- **Keep your work area uncluttered.** Your instructor will tell you where to store backpacks and coats.
- **No eating or drinking is allowed in the laboratory at any time.** Never put anything in your mouth while in the lab.
- Dispose of all chemical waste into the **DESIGNATED WASTE CONTAINERS** located in the fume hoods. **NEVER** pour any chemicals down the drain. Your teacher will describe which waste goes in which container during each lab session.
- The General Chemistry stockroom is located in room DMS 404. Any time you need a piece of equipment you will get it from the stockroom. Make sure you sign your name on the checkout list when you check out the equipment and cross your name off the list when you return the equipment. Clean any borrowed equipment before you return it. You are financially responsible for any equipment checked out to you, including the equipment in your lab drawer.
- If you drop the class after checking in to a drawer, you are required to check out your equipment drawer before the end of the semester. If you fail to check out on time, a hold will be placed on your registration.

3.3 Laboratory Behavior

- Any student not completing the assigned safety quiz before the first experiment will not be allowed to work in the laboratory, resulting in a score of “zero” for that day.
- If you are **more than 20 minutes late** to lab, you will not be permitted in to the lab, and you will receive a “zero” for that day's work.
- If you leave the lab early, without permission from your instructor, you will receive a “zero” for the lab report for the experiment performed that day.
- Do not leave the lab during the lab procedure for any reason unless you have permission from your instructor.
- **Do not enter the lab until your instructor arrives.** This is a safety policy (see below).
- **Disruptive and/or unsafe behavior will not be tolerated:** cell phones, smart phones, iPods, iPads, laptops, etc., should all be muted or turned off **prior** to entering class. Answering phone calls or other disruptive/unsafe behavior will result in removal from the classroom and possible dismissal from the course.

3.4 Laboratory Attire

- **All persons in the laboratory shall wear goggles with impact and splash protection whenever any chemicals or experimental equipment are in use or on the benches anywhere in the laboratory.** Therefore, the goggles must not only be made from rigid plastic, but also make a splash proof seal with the skin on your face.
- Students who are asked more than twice (in one lab period) to put their goggles on or follow any other safety procedure will be dismissed from the lab for that period. The student will not be allowed to make up that lab and will receive a "zero" for that experiment. **More than two "zeros" means failure of the course.**
- Lab coats must also be worn for further protection.
- Closed-toed shoes must be worn in the laboratory; open sandals or bare feet are forbidden in the laboratory. Shoes must cover the entire foot and be completely enclosed.
- Individuals with long hair must tie it back to keep it away from fire, chemicals, and moving equipment.
- Bracelets, necklaces, neckties, and similar loose items of attire may create a hazardous situation and so they must be confined or not worn in the laboratory.
- **Students will not be allowed to enter the laboratory if not properly clothed and will receive a "zero" for that day's experiment and will not be allowed to make it up.**

4. Email Etiquette

Emails sent to any university employee should be written as and thought of as a professional (business) email. Therefore, the following guidelines should be followed:

1. **Include the course information in the subject line** (e.g. “CHEM 121L”).
2. **Include a salutation** (e.g. Dr., Prof., Mr., Ms., Mrs., etc.).
3. **Write complete sentences.**
4. **Do not use “texting English.”**
5. **Put a blank line between paragraphs.**
6. **Conclude the email with your first and last name.**
7. **Do not include your NSHE ID number or your Social Security number.** (State university emails

- are public domain.
8. **Do not ask how to answer a question on the lab report.** Ask specific questions.
 9. **Do not ask about your course grade.** Due to the federal law, the Family Educational Rights and Privacy Act (FERPA) of the U.S. Congress, we cannot **comment on, communicate, or acknowledge** your grade *via email or telephone*. (This is to protect **your** privacy as a student and an adult.)
 10. **Do not send an email asking about information unless you have already exhausted all possibilities in your search.**
 11. **Use the same format** (salutation, complete sentences, concluding with your name) **listed above for all replies.**
 12. **Please be patient; do not expect an immediate response.** Allow **24 hours** for a response to your email.

5. University Policies

5.1 Academic Dishonesty

Your continued enrollment in the course implies that you have read and are familiar with the Student Code of Conduct and Policies of the University Nevada, Reno. The following definitions and possible courses of action concerning academic dishonesty are taken from Section 8.3 of the University Catalog and can be found online at: <http://catalog.unr.edu/>

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5.2 Students with Disabilities Act

The Department of Chemistry and the University of Nevada, Reno support providing equal access for students with disabilities. Any student with a disability needing academic adjustments or accommodations is requested to speak with me or the Disability Resource Center as soon as possible to arrange for appropriate accommodations. The contact information for the Disability Resource Center is:

Disability Resource Center
Thompson Building, Suite 100.
Phone: 775-784-6000
Website: <http://www.unr.edu/drc>

5.3 Academic Success Services

Your student fees cover usage of the Math Center (784-4433 or <http://www.unr.edu/mathcenter/>), Tutoring Center (784-6801 or <http://www.unr.edu/tutoring-center/>), and University Writing Center (784-6030 or <http://www.unr.edu/writing-center/>). These centers support your classroom learning; it is your responsibility to take advantage of their services.

Keep in mind that seeking help outside of class is the sign of a responsible and successful student.

5.4 Surreptitious and Covert Video and Audio Recording

Surreptitious or covert video-taping of class or unauthorized audio recording of class is prohibited by law and by Board of Regents policy. This class may be videotaped or audio recorded only with the written permission of the instructor. In order to accommodate students with disabilities, some students may have been given permission to record class lectures and discussions. Therefore, students should understand that their comments during class may be recorded.

6. Laboratory Schedule for CHEM 121L – Summer 2023

IMPORTANT:

- **The Laboratory Safety Quiz MUST be completed prior to the first experiment!!**
- Check the CHEM 121L WebCampus course site for lab updates at least 24 hours prior to your lab each week. You are expected to prepare for each laboratory meeting by reading the assigned experiment carefully and reviewing the relevant sections in your lecture notes and textbook.

Laboratory Schedule for CHEM 121L – Summer 2023

Date	Experiment Number and Title	Assigned Questions (Due with Lab Report)	Daily Quizzes and Reports Due (Reports due at beginning of lab period)
July 10 th	Check-in and Lab Safety Lab #1: Basic Lab Technique ** Safety Quiz Due Before Lab**	Lab #1 Pg. 8: 1,2	Lab Safety Quiz Pre-lab Quiz 1
July 11 th	Lab #2: Chemical and Physical Properties: Separation of a Mixture	Lab #2 Pg. 19: 1-6	Pre-lab Quiz 2 Lab Report #1 due
July 12 th			
July 13 th	Lab #3: Gravimetric Determination of a Sulfate	Lab #3 Pg. 31: 1-4	Pre-Lab Quiz 3
July 14 th	Lab #4: Finding the Empirical Formula of Zinc Iodide	Lab #4 Pg. 39: 1-13	Pre-Lab Quiz 4 Lab Report #3 due
July 17 th	Lab #5 Metathesis Reactions and Net Ionic Equations	None	Pre-Lab Quiz 5 Lab Report #4 due
July 18 th	Lab #6: Classifying Reactions in the Copper Cycle	Lab #6 Pg. 59: 1-6	Pre-Lab Quiz 6 Lab Report #5 due
July 19 th			
July 20 th	Lab #7: Quantitative Analysis of Vinegar via Titration	Lab #7 Pg. 75: 1-5	Pre-Lab Quiz 7 Lab Report #6 due
July 21 st	Lab #7 (cont.): Quantitative Analysis of Vinegar via Titration		Nothing is due
July 24 th			
July 25 th	Lab #8: Using Polymers to Investigate the Behavior of	Lab #8 Pg. 87: 1-10 (Part A)	Pre-Lab Quiz 8 Lab Report #7 due
July 26 th	Lab #9: Bonding Theories and Molecular Geometry	None	Pre-Lab Quiz 9 Lab Report #8 due
July 27 th	Check-out of Lab / Review		Lab Report #9 due
July 28 th	Final Exam		

** On the days we are not actively doing labs, we will use the time to work on our Reports or go over any Questions students may have.