CHEMISTRY 101 DETAILED WEEKLY TEXTBOOK HOMEWORK & READING SCHEDULE*

*Refer to textbook homework assignment and pre-lecture assignment for corresponding chapters to read.

Week 1	Week of August 26–30	Textbook Homework Assignment 1	Basic Skills Review (Videos Available on Course Website)
Monday Lab	First Day Check In		
Tuesday Lecture	Course Intro (Chapter 2.6, 2.8)	(All are from Questions and Problems section.) **Chapter 2:** 89, 93, 102	Dimensional Analysis Density Optional: Significant Figures
Wednesday	No Class		
Thursday Lecture	States of Matter, Naming (Chapter 3.3 & 3.4 Chapter 4.8 & 4.10 Chapter 5.2, 5.3, 5.5)	**Chapter 3:** 15, 24, 31, 49 **Chapter 5:** 20–22, 42–46, 60	Elements, Molecules, Compounds, Mixtures Naming Ionic Compounds Naming Compounds Containing Nonmetals Naming Practice & Review
Friday Discussion	Naming, Elements, Compounds, Mixtures	*This week's textbook homework due in discussion.	

*We expect certain topics from this Tuesday & Thursday's textbook homework to be familiar to you from high school chemistry—these will not be discussed in detail in lecture. These topics are:

- Chemical and physical changes (Textbook section 3.2)
- Dimensional analysis (Section 2.6)
- Density (Section 2.7)

If these are *not* review for you, please take time to read the textbook and to review the supplemental course lecture videos, if necessary. *You can still be successful in this class.*

Week 2	Week of September 2–6	Textbook Homework Assignment 2	Basic Skills Videos
Monday Lab	No Class – LABOR DAY		
Tuesday Lecture	Introduction to the Mole (Chapter 8.2–8.5)	**Chapter 4:** 39, 42, 73, 78, 83 **Chapter 8:** Please complete parts a & b only for the following problems: 21, 29, 30, 31, 40, 41, 91 Also complete problem 114.	Protons, neutrons, electrons* Finding molar mass Grams to moles Moles to grams Counting Particles
Wednesday	Electronic Homework Assignment 1 Due		
Thursday Lecture	Empirical & Molecular Formula (Chapter 8.6–8.9)	Percent Composition: **Chapter 8:** 47 a & b only, 50 a & b only Empirical Formula: **Chapter 8:** 55, 56, 57, 59, 73 Molecular Formula: **Chapter 8:** 77, 81	Empirical & Molecular Formula Percent Composition
Friday Discussion	Week 2 Practice	*This week's textbook homework due in discussion.	

*We will not cover determining the number of protons, neutrons, and electrons in an atom or ion during lecture. If this is *not* review for you, please review section 4.7 and 4.10 of your textbook and/or watch the corresponding video.

Week 3	Week of September 9–13	Textbook Homework Assignment 3	Basic Skills Videos
Monday Lab	Activity 1 – The Mole and Empirical Formula		
Tuesday Lecture	Introduction to Gas Laws (Chapter 13.1, 13.8, 13.9)	**Chapter 13:** 78, 82	Explaining Gas Law Phenomena Kinetic Molecular Theory
Wednesday	Electronic Homework Assignment 2 Due		
Thursday Lecture	Quantitative Gas Laws (Chapter 13.3, 13.5, 13.7)	**Chapter 13:** 17, 31, 49, 51, 64	Deriving Relationships Using the Ideal Gas Law Ideal Gas Law
Friday Discussion	Week 3 Practice	*Aluminum Foil Lab Write-Up & textbook homework due in discussion.	

Week 4	Week of September 16–20	Textbook Homework Assignment 4	Basic Skills Videos
Monday Lab	Activity 2 – Explorations with Gases		
Tuesday Lecture	Dalton's Law of Partial Pressures (Chapter 13.6)	**Chapter 13:** 67, 71, 72	Dalton's Law of Partial Pressures
Wednesday	Electronic Homework Assignment 3 Due		
Thursday Lecture	Gas Law Applied Problems	**Chapter 13:** 105, 106, 128, 138, 145, 151	Problems that Combine Phenomena
Friday Discussion	Week 4 Practice	*Gas lab write up & this week's textbook homework due in discussion.	

Week 5	Week of September 23–27		Basic Skills Videos
Monday Lab	Exam 1 Review Questions	No textbook homework due this Friday!	Don't miss Exam 1!
Tuesday Lecture	Exam 1 Review		
Wednesday			
Thursday Lecture	Chemical Reactions (Chapter 6.1–6.2, 7.1)		Balancing Equations Writing Equations in Formulas from Words
Friday Discussion	Exam 1 Passed Back Go over exam 1!		

Week 6	Week of September 30–October 4	Textbook Homework Assignment 6	Basic Skills Videos
Monday Lab	Workshop 1 – Chemical Reactions		
Tuesday Lecture	Limiting Reactant 1 (Chapter 9.1–9.4)	**Chapter 9:** Please complete parts a & b only of the following problems: 5, 14, 16, 24 Also complete 29 & 35.	Mole-Mole and Mole-Mass Relationships Finding the Limiting Reactant Finding the Amount of Excess Reactant Leftover
Wednesday			
Thursday Lecture	Limiting Reactant 2 (Chapter 9.5)	**Chapter 9:** 45, 48 a & b, 90	
Friday Discussion	Limiting Reactant Practice	*This week's textbook homework due in discussion.	

Week 7	Week of October 7–11	Textbook Homework Assignment 5	Basic Skills Videos
Monday Lab	Activity 3 – Nuts and Bolts		
Tuesday Lecture	Precipitation Reactions (Chapter 7.1–7.2)	**Chapter 6:** 6, 13, 16, 18, 24, 40 a–e, 48, 52, 73 d–h, 76 **Chapter 7:** 11, 15, 18, 22,	Solubility Precipitation Reactions
Wednesday			
Thursday Lecture	Precipitation Reactions Part 2 (Chapter 7.3–7.4)	**Chapter 7:** 26, 40, 75	Molecular, Complete, and Net Ionic Equations
Friday Discussion	Precipitation Reactions Practice	*This week's textbook homework due in discussion.	

Week 8	Week of October 14–18	Textbook Homework Assignment 7	Basic Skills Videos
Monday Lab	Activity 4 – Precipitation Reactions		
Tuesday Lecture	Molarity (Chapter 15.2, 15.4, 15.5)	**Chapter 15:** 34, 35, 37, 49, 55, 59, 61	Solution Problems
Wednesday	Electronic Homework Assignment 4 Due		
Thursday Lecture	Concentration of Ions Problems (Chapter 15.6–15.7)	**Chapter 15:** 64, 65, 67, 70, 91	Ions in Solution Problems
Friday Discussion	Concentration of Ions Practice	*This week's textbook homework due in discussion.	

Week 9	Week of October 21–25	Textbook Homework Assignment 8	Basic Skills Videos
Monday Lab	Activity 5 – Limiting Reactants Virtual Lab		
Tuesday Lecture	Gas Stoichiometry (Chapter 13.1)	Chapter 13: 85, 87, 89	Gas Stoichiometry Problems
Wednesday	Electronic Homework Assignment 5 Due		
Thursday Lecture	Stoichiometry Workshop	None	
Friday Discussion	Stoichiometry Practice/ Exam Review	*This week's textbook homework due in discussion.	

Week 10	Week of October 28–November 1		Basic Skills Videos
Monday Lab	Exam 2 Review Questions	No textbook homework due this Friday!	Don't miss Exam 2!
Tuesday Lecture	Exam 2		
Wednesday			
Thursday Lecture	Heat & Energy (Chapter 10.3)		Endothermic and Exothermic Processes Energy Diagrams
Friday	Exams 2 Passed Back, Go over Exam 2		

Week 11	Week of November 4–8	Textbook Homework Assignment 9	Basic Skills Videos
Monday Lab	Workshop 2 – Heat and Energy		
Tuesday Lecture	Atomic Theory, Electron Configuration (Chapter 11.6–11.10)	**Chapter 10:** 8, 11, 13, 14, 65 **Chapter 11:** 9, 16, 24, 26, 29, 47, 50, 51, 56, 61, 63, 95, 98	Atomic Structure History Orbitals Electron Configuration
Wednesday			
Thursday Lecture	Bonding and Periodic Trends (Chapter 11.1, 12.1–12.3)	**Chapter 11:** 73, 74 **Chapter 12:** 1, 7, 8, 11, 13, 19, 25, 33, 38, 43, 44, 48	Bonding Periodic Trends
Friday Discussion	Electron Configuration Practice, Trends Practice	*This week's textbook homework due in discussion.	

Week 12	Week of November 11–15	Textbook Homework Assignment 10	Basic Skills Videos
Monday Lab	Activity 6 – Atomic Theory		
Tuesday Lecture	Introduction to Molecular Structure (Ch. 12.4–12.7)	**Chapter 12:** 57, 59, 64, 65, 68	Lewis Structures
Wednesday	Electronic Homework Assignment 6 Due		
Thursday Lecture	Introduction to Shape & Polarity (Ch. 12.8–12.10)	**Chapter 12:** 78, 81, 86, 110, 116, 119	Shape & Polarity 1
Friday	Lewis Structures Practice	*This week's textbook homework due in discussion.	

Week 13	Week of November 25–29	Textbook Homework Assignment 11	Basic Skills Videos
Monday	Activity 7 – Models of Molecules 1		
Tuesday	Exceptions to the Octet Rule, Shape & Polarity (Chapter 12.7)	Start Workshop 3 Part 1 in Lab Manual	Lewis Structures Exceptions to the Octet Rule
Wednesday	Electronic Homework Assignment 7 Due		
Thursday	Shape & Polarity 2, Introduction to Intermolecular Forces (Chapter 14.1–14.4)	Start Textbook Homework Assignment 12	Shape & Polarity 2: Expanded Octets Intermolecular Forces
Friday	Finish Workshop 3 Parts 1 & 2	Workshop 3 Due Monday in Lab	

Week 14 – Thanksgiving Break – No Assignments!

Week 15	Week of December 2–6	Textbook Homework Assignment 12 (Suggested)	Basic Skills Videos
Monday	Exam 3 Review Questions	*Have your TA check Workshop 3 Parts 1 & 2.	
Tuesday	Intermolecular Forces (Chapter 14.1–14.4)	(Suggested) **Chapter 14:** 8, 10, 21, 25, 27, 74, 75, 76, 77, 80	Intermolecular Forces
Wednesday	Electronic Homework Assignment 8 Due, Exam 3 Review Questions Due	No textbook homework due this week!	
Thursday	Exam 3		
Friday	No class		

Week 16	Week of December 9–13	Assignments
Monday	Exam 3 Passed Back, Go over Exam 3	No other assignments this week! Good luck on the final!
Tuesday	Review Lecture	
Wednesday		
Thursday	Reading Day	
Friday	Chem 101A Final Exam 8:00 AM	

Week 17	Week of December 16–20	Assignments
Monday	Chem 101A Final Exam 8:00 AM	No assignments this week! Good luck on the final!
Tuesday	Chem 101B Final Exam 7:00 PM	
Wednesday		
Thursday		
Friday	Chem 101C Final Exam 8:00 am Chem 101D Final Exam 7:00 PM	