

"Pre-Chemistry, Chemistry Prep Course" - Summer 2026

Week	Day	Dates	Lessons / Discussion	In-Class "Pen-to-Paper" Assignments
1	M	7 / 13	Measurement, Sig. Figs. Unit Conversions, Density	1-1a - Unit Conversions / Dimensional Analysis 1-1b - Accuracy vs Precision; Density, Types of Matter
	Tu	7 / 14	Atomic Structure, Isotopes, Molecules, Ions, Naming	1-2a - Atoms, Molecules, Ions, Isotopes, Periodic Table 1-2b - Naming Ionic and Covalent Compounds
	W	7 / 15	Mole Conversions, Mass %, Empirical/Molecular Formula	1-3a - Molar Mass, Grams to Moles, Mass Percent 1-3b - Empirical Formula and Molecular Formula
	Th	7 / 16	Balancing Reactions, Limiting Reactants, % Yield	1-4a - Types of Reactions and Balancing Equations 1-4b - Mole Conversions, Limiting Reactant Problems
2	M	7 / 20	Concentration and Molarity, Dilutions, Precipitation Rxns.	2-1a - Concentration, Molarity, and Dilutions 2-1b - Solubility Rules, Precipitates, Net Ionic Rxns.
	Tu	7 / 21	Pressure Conversions, Gas Laws, and Ideal Gas Law	2-2a - Units of Pressure, Named Gas Laws. 2-2b - Combined and Ideal Gas Law. Partial Pressure
	W	7 / 22	Types of Energy, Transfer of Heat (Exo vs Endothermic)	2-3a - Energy, Heat, Work. Exothermic vs. Endothermic 2-3b - Introduction to Calorimetry and Specific Heat
	Th	7 / 23	Calorimetry, Heating Curves, & Enthalpy of Reaction (ΔH)	2-4a - Calorimetry Practice, Heating Curve for Water 2-4b - Calculating Heat of Rxn: Hess' Law vs. ΔH°_f 's
3	M	7 / 27	Electromagnetic Radiation, Bohr Model, e- configuration	3-1a - Electromagnetic Radiation (EMR) Calculations 3-1b - Assigning Electron Config.'s, Core vs. Valence
	Tu	7 / 28	Periodic Trends, Electron Dot Notation, Lewis Structures	3-2a - Polarity / Dipoles, and Electron Dot Notation 3-2b - Lewis Structures, Using BDE's to Calculate ΔH
	W	7 / 29	VSEPR Theory, Types of Intermolecular Forces (IMF's)	3-3a - Lewis Structures, Resonance, VSEPR Theory 3-3b - States of Matter, Types of Intermolecular Forces
	Th	7 / 30	Three Types of Solids, Vapor Pressure, Changes of State	3-4a - Ionic, Atomic, Covalent Solids; Metallic Bonding 3-4b - Vapor Pressure of a Liquid, Changes of State
4	M	8 / 3	Solutions, Molarity, Mass Percent, and Mole Fraction	4-1a - Molarity and Mass Percent Practice Problems 4-1b - Boiling Pt. Elevation, Freezing Pt. Depression
	Tu	8 / 4	The Equilibrium Constant, K, and Equilibrium Expressions	4-2a - How to Calculate the Equilibrium Constant, K 4-2b - ICE Tables and Le Chatelier's Principle
	W	8 / 5	Bronsted-Lowry Acids and Bases, and pH Calculations	4-3a - pH Scale; pH, pOH, $[H^+]$, $[OH^-]$ Calculations 4-3b - Acid Dissociation Reactions, and Acid Strength
	Th	8 / 6	pH Calculations for Weak Acids; Radioactive Decay	4-4a - Using ICE Tables for the pH of a Weak Acid 4-4b - Nuclear Reactions: Alpha, Beta, Gamma Decay

Note: This schedule is tentative. I reserve the right to alter it at any time during the course, and I often do!!