CHM 1025 Introduction to General Chemistry Topics
Text: Introductory Chemistry, 6th Edition Covering CH 2-12

Topic	CHM 1045	M = mandatory O = optional V = overview
Measurements	Dimensional Analysis	M
	Sig Figs	M
	Rounding	M
	Scientific notation	M
	Uncertainty in measurements	M
	Density, Temp	M
	Temp conversions	M
	Basic units in Metric and SI	M
	Metric prefixes and meaning	M
	English system	M
	Conversions between English and metric	M
	Heat, units of heat and specific heat	M
	Volume (calculated and by displacement)	M
Kinetic-Molecular Treatment of Gases	Properties of Gases	M
	Units of pressure	M
	Gas Laws (Boyles, Charles, Guy Lussac, combined, ideal, Daltons)	M
	Avogadro's Law	O
	Stoichiometry	M
	Vapor pressure concept	V
Periodic table and matter	Periodic trends	M
	Groups/periods	M
	States of matter	M
	Classifications of matter	M
	Classification of elements	M
	Physical changes and properties	M
	Chemical changes and properties	M
	Potential and kinetic energy	M
	Conservation of mass	M
	Conservation of energy	M
	Chemical formulas	M
Structure of Atom	History & Application of Atomic Theory	M
	Quantum concept	V
	Model of atom	M
	Atomic notation	M
	Atomic orbitals	M
	Electromagnetic spectrum	M
	Electron Configuration	M
	Electronic Transitions – (no calcs needed)	V
Interatomic Forces-Chemical Bonding-Molecular Geometry	Ionic and covalent bonding	M
	Polar, non-polar and coordinate covalent	M
	Lewis Dot Structures/VSEPR	M
	Electronegativity & Polarity	M
	Molecular geometry	M
Nomenclature & Reactions	Nomenclature-Covalent, Ionic, Acids, Bases	M
	Molar mass	M
	Molar volume	M
	Mole calculations	M
	Mole to mole relationships	M
	Limiting Reactant	M
	% yield	M
	Avogadro's #	M
	% Composition	M
	Empirical & Molecular Formulas	M
	Stoichiometry	M
	Balancing chemical equations	M
	Molecular equation, complete ionic equation and net ionic equation	M
	Classification of reactions to include: Single & double displacement, Precipitation, Acid-Base, Redox Reactions, combination, decomposition	M
Solutions	Gases, liquids and solids in solution	O
	Dissolving process	O
	Solubility - Unsaturated, saturated and supersaturated solutions	O
	Molar concentration	O
	Solution stoichiometry	O