

PBHS CHEMISTRY HONORS SYLLABUS

UNIT	Content	Chapter	Section	Approx. # of Weeks
Lab Skills and Safety	Safety Rules / Safety Contract	pp.xviii-xxi		1
	Lab Equipment / Demonstration and Quiz			2
MATTER & MEASUREMENT	The Practice of Science, Properties of Matter, Elements	1	All	2
	Scientific Method, Scientific Measurement	2	All	2
ATOMIC STRUCTURE & MODELS	Atomic theory, Atom structure, Counting Atoms	3	All	2
	Atomic Models	4	1	
NUCLEAR CHEMISTRY	The Nucleus, Radioactive Decay, Nuclear Radiation, fusion and Fission	21	All	2
PERIODICITY & BONDING	History of the Periodic Table, Electron Configuration, Periodic Properties	5	All	3
CHEMICAL BONDING	Covalent, Ionic Bonding, intermolecular forces	6	1-3,5	2
CHEMICAL FORMULAS & REACTIONS	Chemical Names and Formulas. Determining chemical formulas	7	1,4	2
	Chemical Equations and Reactions	8	1,2	3
STOICHIOMETRY	Stoichiometric Calculations, Limiting Reactant, Percent yield	9	All	3
STATES of MATTER	Kinetic Molecular Theory, Liquids, Solids, Changes of State,	10	1-4	1
ACIDS & BASES	Properties of Acids & Bases, Acid-Base Reactions	14	1,3	1
	pH, Titrations	15	1,2	1
REACTION ENERGY	Thermochemistry	16	1	1
REACTION KINETICS	Reaction Process, Reaction Rate	17	1, 2	1
CHEMISTRY & UNIFYING THEMES	Dynamic Equilibrium	18	1	1
	Carbon Diversity, renewable & non-renewable resources	22	1,2	1
	Molecular Clocks	23	Page 762	0.5
	Biotechnology	32	Page 774	0.5
	Environmental Impact	Element Hand Book	Page 784	1