

Chemistry Course Outline

2007 - 2008

Date	Unit	Reading Assignment	SF Assignment	Lab / Class Activity
Sep. 12	Intro	Chapter 1: Introduction to Chemistry		LM 1.2: Bunsen Burner
Sep. 19		Chapter 2: Data Analysis	Short List of Project Ideas	LM 2.2: Graphing
Sep. 26		Chapter 3: Matter -- Properties and Changes		LM 3.1: Density
Oct. 3	Atoms & Elements	Chapter 4: The Structure of the Atom		SSL 3: Separation of Aspirin
Oct. 10		Chapter 5: Electrons in Atoms	Question & Bibliography	Lab 5: Emission Spectra
Oct. 17		Chapter 6: The Periodic Table & Periodic Law		LM 6.1: Periodic Table
Oct. 24		Chapter 7: The Elements		ChemLab 7: Hard Water
Oct. 31	Bonds	Chapter 8.1-8.3: Ionic Compounds		SSL 4: Periodicity
Nov. 7		Chapter 8.4-9.2: Metallic Bonds & Covalent Bonds	First Draft of Research Paper	LM 8.2: Formation of Salt
Nov. 14		Chapter 9.3-9.5: Covalent Bonding II	Experimental Plan & Hypothesis	LM 9.2: Covalent Compounds
*** Thanksgiving Break ***				
Nov. 28		Chapter 10: Chemical Reactions	SF Regis. Forms	LM 10.1: Single-Replacement
Dec. 5			Research Paper	LM 10.2: Double-Replacement
Dec. 12		*** Review Chapters 1-10 ***		*** Lab Practical A ***
*** Semester Break ***				
Jan. 9	Formulas	Chapter 11.1-11.3: The Mole	Prelim. Trials / Early Data; Logbook	LM 11.2: Mole Ratios
Jan. 16		Chapter 11.4-12.1: Formulas & Stoichiometry I	Logbook	ChemLab 11: Hydrated Crystals
Jan. 23		Chapter 12.2-12.4: Stoichiometry	First Draft of Project Report; Logbook	LM 12.1: Limiting Reactions
Jan. 30	Science		Final Copy of Project Report	Oral Presentations
Feb. 6	Fair		Visual Display / Oral Presentation	Oral Presentations
Feb. 13	States of Matter	Chapter 13.1-13.3: States of Matter		SSL 9: Bolling Point
Feb. 20		Chapter 13.4-14.2: Phase Changes & Gases		LM 14.1: Charles' Law
Feb. 27		Chapter 14.3-15.1: Gases & Solutions		LM 15.1: Solubility Curve
Mar. 5		Chapter 15.2-15.4: Solutions		Lab 15b: Boiling Point Elevation
Mar. 12		Chapter 16.1-16.3: Energy and Chemical Change		SSL 12: Specific Heat
*** Easter Break ***				
Mar. 26	Energy & Reactions	Chapter 16.4-17.1: Enthalpy & Reactions		LM 16.1: Heats of Solution and Reaction
Apr. 2		Chapter 17.2-17.4: Reaction Rates		LM 17.1: Rate of Reaction
Apr. 9		Chapter 18: Chemical Equilibrium		LM 18.1: Reversible Reactions
*** FIRST Break ***				
Apr. 23	Topics in Chemistry	Chapter 19: Acids and Bases		LM 19.1: Acids, Bases, and Neutralization
Apr. 30		Chapter 20: Redox Reactions		LM 20.2: Oxidation Numbers
May 7		Chapter 21: Electrochemistry		???: Electrolysis / Electroplating
May 14		Chapter 25: Nuclear Chemistry		???: Isotopes
May 21			*** Review Chapters 11-23 ***	
May 28				*** SAT II Review (optional) ***