Coral Glades High School Mrs. J. Kitchener

Chemistry 1 H Course Outline
2017-2018

Course Description:

Chemistry I will provide students with an opportunity to study the composition, properties, and changes associated with matter. Topics will include, but not be limited to: heat, changes of matter, atomic structure, bonding, the periodic table, formulas, equations, mole concept, gas laws, reactions, solutions, equilibrium systems, and oxidation reduction reactions. Laboratory activities, which include the use of the scientific method, measurement, laboratory apparatus, and safety, are an integral part of this course.

Unit#: I	**Unit Title: PHYSICAL PROPERTIES OF MATTER**	
Concepts	**Corresponding Textbook Chapters (Holt Modern Chemistry)**	**Benchmarks: Objectives and Skills www.floridastandards.org**
Lab Skills and Safety	Textbook pp.xviii-xxi Safety Contracts	
Intro to Matter	Chapter 1, Sec 2	SC.912.P.8.2
Describe Matter	Chapter 1, Sec 2	SC.912.P.8.2, SC.912.P.10.2
Scientific Measurement	Chapter 2, Sec 3	SC.912.N.1.1, SC.912.N.1.3, SC.912.N.1.6, SC.912.N.1.7
Density	Chapter 2, Sec 3	SC.912.N.1.1, SC.912.N.1.3, SC.912.N.1.6, SC.912.N.1.7
Unit#: II	**Unit Title: ENERGY – PARTICLES IN MOTION**	
Movement of Particles	Chapter 1, Sec 2 Chapter 3, Sec 1	SC.912.P.8.3, SC.912.P.8.1
Effect of Pressure	Chapter 10,Sec 1-3 Chapter 11	SC.912.P.12.10, SC.912.P.10.5
Unit#: III	**Unit Title: ENERGY AND STATES OF MATTER**	
Energy Involved in Changes	Chapter 10, Sec 4 Chapter 16, Sec 1	SC.912.P.10.1, SC.912.P.10.2, SC.912.P.10.4, SC.912.P.10.5, SC.912.P.10.6, SC.912.P.10.7
Unit#: IV	**Unit Title: DESCRIBING SUBSTANCES**	
Pure Substances vs Mixture	Chapter 1, Sec 2 and 3 Chapter 7	SC.912.P.8.7
Elements vs Compounds	Chapter 1, Sec 3	SC.912.P.8.5
Avogadro's Hypothesis	Chapter 7	SC.912.P.8.7
Chemical Names and Formulas	Chapter 7, Sec 1	SC.912.P.8.7
Unit#: V	**Unit Title: COUNTING PARTICLES TOO SMALL TO SEE**	
The Mole	Chapter 3, Sec 3	SC.912.P.8.9
Molar Mass	Chapter 3, Sec 3 Chapter 7, Sec 3	SC.912.P.8.9
Percent Composition	Chapter 7, Sec 3	SC.912.P.8.7
Empirical and Molecular Formulas	Chapter 7, Sec 4	SC.912.P.8.7

Unit#: VI Unit Title: PARTICLES WITH INTERNAL STRUCTURE		
Atomic Theory	Chapter 3, Section 1 and 2	SC.912.P.8.3, SC.912.P.8.4,
Chemical Families	Chapter 5, Section 1 and 2	SC.912.P.8.7
Conductivity	Chapter 6, Sec 1, 2 and 3	SC.912.P.8.8
Determining Nomenclature of Ionic Compounds	Chapter 7, Sec 1	SC.912.P.8.8
Unit#: X Unit Title: MODELS OF THE STRUCTURE OF THE ATOM		
Atomic Theory model development and evidence	Chapter 3, Section 2 Chapter 4, section 1	SC.912.P.8.3, SC.912.P.8.4
Isotopes and the nucleus	Chapter 3, section 3	
Unit#: XI Unit Title: BONDING AND THE PERIODIC TABLE		
Bohr model	Chapter 4, section1	SC.912.P.8.3, SC.912.P.10.9
Periodic Trends	Chapter 5	SC.912.P.8.5
Electron arrangements	Chapter 4, secs 2, 3 Chapter 5, section 2	SC.912.P.8.5, SC.912.P.8.4
Covalent molecules	Chapter 6, section 2	SC.912.P.8.6
Lewis diagrams	Chapter 6, section 2	SC.912.P.8.7
Unit#: VII Unit Title: CHEMICAL REACTIONS: PARTICLES AND ENERGY		
Chemical Equations	Chapter 8 Section 1	SC.912.P.8.2, SC.912.P.10.12
Reaction Types	Chapter 8 Section 2	SC.912.P.8.8
Unit#: VIII Unit Title: INTRODUCTION TO STOICHIOMETRY		
Stoichiometry	Chapter 9, Section 1	SC.912.P.8.9, SC.912.N.1.5, SC.912.N.2.5
Stoichiometry Calculations	Chapter 9, Section 2	SC.912.P.8.9
Limiting Reactant and Percent Yield	Chapter 9, Section 3	SC.912.P.8.9

Grading:

A point system is used in this class. The goal is to accumulate as many points as possible out of the total number assigned.

Broward County Grading Scale:

90 – 100 %	A	70 - 76 %	C
87 – 89 %	B+	67 – 69 %	D+
80 – 86 %	B	60 - 66 %	D
77 – 79 %	C+	0 – 59 %	F