CURRICULUM MAP Chemistry 2nd Semester

1-3 wks		4-6 wks	7-10 wks	11-18 wks
content	• Reaction types • Balancing reactions • **Chap. 11**	• The Mole • Stoichiometry • **Chap 10,12**	• Gas laws • Pressure • Volume • Temperature • **Chap 13-15**	• acids and bases • pH • thermodynamics • Organic and Biochemistry • **Chap 16,19,22-24**
Skills	• Know how Avogadro's number is related to the mole of any substance • Calculate the mass of a mole of a substance • Convert between mass and moles • Use mole to convert between measure ments • Know representative particles of chemical substance	• ID reaction type as either synthesis, decomposition, single or double replacement or combustion • Write equations describing chemical reactions using appropriate symbols • Write balanced equations when given names or formulas of reactants • Construct balanced equations from representative particles • Calculate the amount of reactants required or products formed in a reaction • Construct mole ratios from balanced equations and apply to mole calculations • ID limiting and excess reagents in a reaction to calculate maximum products produced • Calculate theoretical, actual or percent yield	• Describe motion of gas particles according kinetic theory • Interpret pressures based on kinetic theory • Describe how volume of a container affects pressure • State Boyles, Charles, Gay-Lussac and combined gas laws • Apply gas laws to contained gases • Calculate quantities of gases at specified conditions • Distinguish between ideal and real gases	• List the properties of acids and bases • Name and acid or base when given the formula • Given the hydrogen ion or hydroxide ion concentration, classify a solution as neutral, acidic, baces • Convert hydrogen-ion values of pH and hydroxide=ion concentrations into values of pOH • Properties and Naming hydrocarbon • Functional groups of organic cpds. • Chemistry of Life (may be in 1st Semester)

Labs	• Chemical Changes to ID • Gold Penny	• Analysis of Aspirin • Unknown percent mixture of sodium carbonate	• Molecular wt. of gas • Absolute Zero	• Analysis of Vinegar • Vitamin C in fruit juice