Lesson Plans for AP Chemistry

Diane Paskowski

March 8th to March 20th

**Chemical Kinetics - Chapter 12**

Mass State Frameworks

7.5 Identify the factors that affect the rate of a chemical reaction (temperature, mixing, concentration, particle size, surface area, catalyst).

College Board AP Chemistry Curriculum Guidelines:

C3 – The course provides instruction in the five content areas of which one is the reactions (Reaction types, Stoichiometry, Equilibrium, Kinetics, Thermodynamics).

C5 – Laboratory (Physical manipulations; Processes and procedures; Observations and data manipulation: Communication, group collaboration, and the laboratory report)

C6 – The course emphasizes the chemical calculations and the mathematical formulations of principles.

**Lessons**

Thursday, March 8th

A Day

Lecture/discussion: Introduce the concept of rate of reaction – conceptually, graphically, and mathematically. Differentiate between differential rate law and integrated rate law.

Monday, March 12th

C day

Lecture/discussion: Practice problems – how to determine the Rate Law, graphically and mathematically. The significance of Rate Order and how to determine rate order.

Tuesday, March 13th

D day

Lecture/discussion: Half-lives of reactions and activity. Prep for Lab

Wednesday, March 14th

E day

Lab Exercise – demo or individual. Review calculations of order of reaction

Friday, March 16th

G day

Lecture/discussion: Reaction Mechanisms, intermediates, factors that affect Rate.

Monday, March 19th

H day

Review problems and practice

Tuesday, March 20th

A day

Assessment – Part I after lunch in Room 416. Part II in Room 415.