# HIGH SCHOOL CURRICULUM PROPOSAL

PROPOSED COURSE NAME AP Chemistry

OLD COURSE NAME (if applicable)

SUBMITTED BY Matt Sbertoli

Underline the Appropriate Item: New Course / Major revision to an existing course

Implementation Date: August 2013

Person(s) who will write the Curriculum: Matthew Sbertoli

Respond to the following:

Duration: Fall/Spring – Year long course

Open to: Students who exceed the requirements of Honors Chemistry

Prerequisites: A or B in Honors Chemistry, as well as exceed the requirements given by

Math class to be discussed with Mrs. Peed

Pass/Fail Option: No

Credit: Honors/AP Credit for Science will be given

If the course meets a graduation requirement, which one does meet?

This meets 1 year of the 3 year Science requirement at NBHS.

Where does this course fit into department sequence?

This course must come after Honors Chemistry.

What is the potential impact of this course on the other department offerings?

This may impact the current Honors Physics enrollment.

**Course Description** 

This course builds a greater understanding of the concepts and processes of chemistry through a meaningful laboratory experience; improves analytical skills, and prepares students for the Advanced Placement exam given in the Spring.

Special Notes (i.e., extended periods, team teaching, etc.)

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## RATIONALE, OBJECTIVES, STRATEGIES

#### 1. Course Rationale

#### A) What is the evidence of student need for this course?

The idea is that AP Biology and AP Chemistry will be alternated, giving the higher achieving students a course option.

## B) What departmental needs/goals would this course meet?

This gives our department an offering for the highest achieving students a course option.

C) What institutional needs/goals would this course meet?

Same as our departmental needs.

## 2. Course Objectives: What will each student learn and know?

Students will learn about Atoms, Stoichiometry, Types of Reactions, Gases, Thermochemistry, Atomic Structure, Bonding, Covalent Bonds, Liquids and Solids, Properties of Solutions, Kinetics, Chemical Equilibrium, Acids and Bases, and Applications of Aqueous Equilibria.

### 3. What types of instructional strategies will be used in the class?

Lecture, Laboratory, Testing practice, independent practice, activities, graph interpretation, data interpretation.

# 4. What types of student assessment procedures will be used? How will the assessment be used to guide instruction?

Students will be tested informally through questioning and daily work through their homework. Students will be formally tested through exams to prepare them for the AP Test. A great deal of the time will also be laboratory assignments.

5. List resources needed and approximate costs to implement this course. Include staff development, materials, textbooks, additional staff, equipment, technology resources, facilities, and fees.

Textbooks will need to be ordered, as well as lab equipment as recommended by the AP Chemistry textbook and AP curriculum guidelines.

Include any additional information pertinent to your course.