CORRELATION
CURRICULUM FRAMEWORKS

COURSE TITLE: AP Chemistry

COURSE NUMBER: 2003370

SUBMISSION TITLE: Chemistry: The Molecular Nature of Matter and Change, 4th Edition by Silberberg © 2006

PUBLISHER: Glencoe/McGraw-Hill

A. Major Concepts/Content. The purpose of this course is study the development and application of principles and concepts
The content should include, but not be limited to, the following:

- The content specified by the Advanced Placement Program

B. Special Note. Laboratory investigations of selected topics in the content, which also include the use of the scientific method, measurement, laboratory apparatus, and safety procedure, are an integral part of this course.
Credit in this course precludes subsequent credit in Fundamentals of Chemistry, Chemistry I, and/or Chemistry I Honors

C. Course Requirements.

After successfully completing this course, the student will:

INTENDED OUTCOMES (Number and outcome)	**PAGES(S) OR LOCATIONS(S) WHERE TAUGHT**	**I/M***
1. Use the scientific method to solve problems, employ metric measurements, and demonstrate safe and effective use of laboratory instruments.	**8-30, 74, 117-120, 179-182, 200-206, 455,**	**I**
2. Discuss atomic theory and structure.	**44-50, 53-54, 265-268, 271-283,**	**I**

3. Compare the types of binding forces in chemical binding, the geometry of molecules, and the molecular model theory.	**57-61, 72, 135-142, 144-145, 329-359, 367-391, 399-419,**	**I**
4. Demonstrate knowledge of nuclear chemistry.	**4, 1045-1081,**	**M,I**
5. Describe the various states of matter.	**177-178, 425-479,**	**I**
6. Discuss numerous types of chemical reactions.	**135-167, 904-909,**	**I**
7. Demonstrate knowledge of equations and advanced stoichiometry.	**6-7, 87-100, 120-122, 140-141, 143-144, 145-146, 198-200,**	**M,I**
8. Describe chemical equilibrium qualitatively and quantitatively.	**101-117, 152-157, 147-158, 507-510, 723-756, 768-803, 815-854,**	**I**
9. Investigate reaction rates.	**673-708,**	**I**
10. Analyze thermodynamic processes.	**2-3, 5, 159-160, 225-244,347-351, 505-506, 864-894,**	**M, I**
11. Develop an understanding of systematic nomenclature.	**62-71,**	**I**
12. Illustrate the principles of descriptive chemistry.	**39-44, 50-51,54-57, 61-62, 73-76, 151, 158, 160-166, 183-198,210-213, 291-322, 489-504, 510-520, 523-528, 553-663, 1004-1034,**	**I**
13. Analyze the interactions of chemistry, technology, and society.	**31, 245-248, 521-522, 529-530, 711-712, 842-843, 910-946, 961-996, 1014,**	**I**

I = Taught In Depth M = Mentioned Only