

Advanced Placement Class Information

Chemistry

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Text Book Title (ISBN #):

- **Chemistry** (6th edition) (ISBN: 0-618-22156-5); Authors: Zumdahl & Zumdahl
- **Chemistry student laboratory notebook** published by Hayden-McNeil (ISBN: 978-1-930882-23-2)

Text Book Policy (Cost or Other Issues):

Students can purchase a used copy of Zumdahl Chemistry (6th edition) either from a previous AP Chemistry student or another source, such as the internet. The specified student laboratory notebook can be purchased either from me or another source (a university bookstore, the internet, the publisher, etc.)

Other Suggested Materials:

A scientific calculator capable of performing scientific notation and logarithms

Course Description:

This course is designed to be the equivalent of the general chemistry course usually taken during the first college year. For some students, this course enables them to undertake, as freshmen, second-year work in the chemistry sequence at their institution or to register for courses in other fields where general chemistry is a prerequisite. For other students, the AP Chemistry course fulfills the laboratory science requirement and frees time for other courses.

AP Chemistry should meet the objectives of a good general chemistry course. Students should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. The course should contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. The college course in general chemistry differs qualitatively from the usual first secondary school course in chemistry with respect to the kind of textbook used, the topics covered, the emphasis on chemical calculations and the mathematical formulation of principles, and the kind of laboratory work done by students. Quantitative differences appear in the number of topics treated, the time spent on the course by students, and the nature and the variety of experiments done in the laboratory. Secondary schools that wish to offer an AP Chemistry course must be prepared to provide a laboratory experience equivalent to that of a typical college course.

Several topics covered within this course include reaction types, stoichiometry, bonding, thermochemistry, kinetics, chemical equilibrium, and solution chemistry.

Course and Homework Requirements:

Because AP Chemistry is designed to take the place of freshman level college chemistry, it will be as rigorous and demanding as a college chemistry equivalent and will require you to spend time working on multiple assignments outside of class. Be prepared for homework from each class period as well as studying for tests, quizzes, and exams.