

“  
*Equipped with his five  
senses, man explores  
the universe around  
him and calls the  
adventure science*  
- Edwin Powell Hubble

## AP Chemistry

Welcome to JFK High  
School!  
This pamphlet will  
provide some  
information about AP  
Chemistry.



**KEEP  
CALM  
I'M A  
CHEMISTRY  
TEACHER**

### About the instructor

I started my teaching career 15 years ago in Southern California. My degree is in Psychology, but I always had a passion for science, particularly Chemistry. I have taught a variety of subjects including AP Psychology, Sociology, Physical Science and Health. It is a challenge as well as an honor to be able to teach AP Chemistry at JFK High School. Please feel free to contact me if you have any questions.

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# Kennedy High School

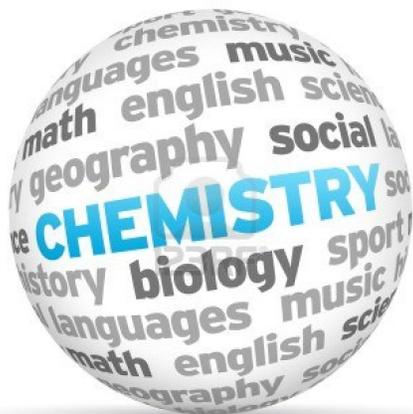


## Advanced Placement Chemistry



“To think is to practice  
brain chemistry”

-Deepak Chopra



## WHY IS CHEMISTRY THE “CENTRAL SCIENCE?”

Chemistry provides important understanding of our world and how it works. It is an extremely practical science and has been very influential in its impact on our daily living. Indeed, chemistry lies near the heart of many matters of public concern: improvement of health care, conservation of natural resources, protection of the environment, provision of our everyday needs for food, clothing, and shelter. Using chemistry, we have discovered pharmaceutical chemicals that enhance our health and prolong our lives. We have increased food production through the development of fertilizers and pesticides. We have developed plastics and other materials that are used in almost every facet of our lives. Unfortunately, some chemicals also have the potential of harming our health or the environment. It is in our best interest as educated citizens and consumers to understand the profound effects, both positive and negative, that chemicals have on our

lives and to strike an informed balance about their uses.

University requirements frequently include the study of chemistry. Your major might be biology, engineering, agriculture, geology, or a new field such as bioengineering. Why do so many diverse subjects share an essential tie to chemistry? The answer is that chemistry, by its very nature, is the “*Central Science*.” Our interactions with the material world raise basic questions about the materials around us. What are their compositions and properties? How do they interact with us and their environment? How, why, and when do they undergo change? Chemistry provides answers to these and countless other questions.

Chemistry provides problem solving practice and develops both math and verbal skills. To understand the concepts of chemistry, students must read carefully and acquire new vocabulary in order to master abstract ideas. An additional benefit of studying chemistry is that virtually all chemistry problems are word problems that require careful analysis and application of both inductive and deductive reasoning.

Chemistry is also a key player in the U.S. economy: 10 % of all scientists and engineers in the U.S. work in an industry with sales of over \$400 billion annually. Indeed, chemistry is the “*Central Science*.”

*Excerpts taken from Chemistry The Central Science, Brown, LeMay and Bursten, 7<sup>th</sup> Ed., Prentice Hall, NJ, 1997.*

## Q&A

### What is AP Chemistry?

AP Chemistry is designed to be the equivalent of the general chemistry course usually taken during the first year of college. For some students, this course enables them to undertake, in their freshmen year, second year work in the chemistry sequence at their institution or to register in 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.

### What are the prerequisites for this course?

“B” or better in Biology and currently enrolled in Algebra II or higher. A first year chemistry course is not required.

### How much time will this class require?

The College Board expects that a minimum of 290 minutes per week in class and an hour per night at home be allotted for an AP course. Currently, JFK has 55-minute class periods giving us 275 minutes in class. Of 275 minutes, the College Board suggests that we spend 90 minutes per week in the laboratory. Parents should expect their students to spend additional time outside of the scheduled class period before or after school: checking homework, asking questions, completing assessments, and working on laboratories and projects.