**Jefferson County High School**
**Course Syllabus**

**A. Course** Advanced Placement Chemistry

**B. Department** Science

**C. Course Description**

AP Chemistry is a year-long course designed to be the equivalent of a college introductory course in chemistry. This class is highly recommended for students interested in majoring in chemistry, biology, engineering, or the field of medicine. To be successful in AP Chemistry, students need a strong background in science and math. Students will take the AP Chemistry Exam. Qualifying scores on the AP Chemistry Exam may enable the student to receive college credit for general chemistry lab and lecture (8 hrs.).

**D. Grade Term** Full Year

**E. Grading Scale**

| Range | | Honors/ Regular | College-Level | A.P. |
|---|---|---|---|---|
| 93-100 | A | 4.0 | 4.5 | 5.0 |
| 85-92 | B | 3.0 | 3.5 | 4.0 |
| 75-84 | C | 2.0 | 2.5 | 3.0 |
| 70-74 | D | 1.0 | 1.5 | 2.0 |

**F. Term Dates**

a. 1st 9 Weeks August 5, 2016 – October 7, 2016
b. 2nd 9 Weeks October 8, 2016 – December 16, 2016
c. 3rd 9 Weeks January 5, 2017 – March 15, 2017
d. 4th 9 Weeks March 16, 2017 – May 25, 2017

**G. Textbook** Brown, Theodore L., et al. *Chemistry: The Central Science*. 11th ed. Prentice Hall

**H. Other Required Reading**

a. None

**I. Other Resources**

a. Odysseyware

**J. Major Assignments**

None

**K. Procedures for Parental Access to Instructional Materials**

a. Aspen Parent Portal
b. Instructor's Website
c. Email Instructor
d. Parent Teacher Conference
    a. There are two designated conference dates during the school year. Parents who would like to request additional meetings may make appointments for conferences with the teachers (during their planning periods), counselors, or a principal by telephoning the school office.

**L. Field Trips**

**a.** Any scheduled fieldtrip will have a definite educational purpose and will reflect careful planning. Signed permission forms will be obtained when an off campus trip is planned.

**M. Standards & Objectives**

a. I can recognize that chemical elements are fundamental building materials of matter, and all matter can be understood in terms of arrangements of atoms; these atoms retain their identity in chemical reactions.
b. I can explain chemical and physical properties of materials by the structure and the arrangement of atoms, ions, or molecules and the forces between them.
c. I can analyze changes in matter involving the rearrangement and reorganization of atoms and the transfer of electrons.
d. I can determine the rates of chemical reactions by details of the molecular collisions.
e. I can use the laws of thermodynamics to describe the essential role of energy and explain and predict the direction of changes in matter.
f. I can conclude the any bond or intermolecular attraction that can be formed can be broken; these two processes are in a dynamic competition, sensitive to initial conditions and external perturbations.