Pre AP Chemistry I

Course Syllabus

2008-2009

Instructor: Kathleen Brown

Office: Room 216

Conference Hours: 3rd Period (10:00AM-10:50AM)
Office Phone: 903-731-8005
E-Mail Address: kbrown@palestineschools.org
Web Page: http://classroom.palestineschools.org/webs/kathleen_brown/

A. Description

This course will provide students the opportunity to conduct laboratory investigations using scientific methods while using critical thinking and scientific problem solving. Chemistry students will study a variety of topics that include: characteristics of matter, energy transformations during physical and chemical changes, atomic structure, periodic table of the elements, behavior of gases, bonding, nuclear fission and nuclear fusion, oxidation-reduction reactions, chemical equations, properties of solutions, acids and bases, and chemical reactions. Students will also investigate how chemistry is an integral part of our daily lives.

B. Organization

This course is structured to be a lecture-lab course with topics being presented through the use of many different types of media and supplemented by hands on lab instruction and investigation. Teacher demonstrations, group activities and a project each semester will also increase interest and learning. In class assignments, homework, quizzes and labs will be assigned by the instructor with a unit exam following completion of each unit and a semester final exam.
C. Course Objectives

In accordance with Chapter 112 of Texas Essential Knowledge and Skills for Science Subchapter C High School:

1. The student will conduct field and laboratory investigations using environmentally appropriate, safe, and ethical practices through scientific methods while using critical thinking to solve scientific problems and make informed decisions.
2. The student will collect data, make measurements with precision, express and manipulate chemical quantities using scientific conventions and mathematical procedures such as dimensional analysis, scientific notation, and significant figures.
3. The student will organize, analyze, evaluate, make inferences, predict trends from data and communicate valid conclusions.
4. The student will evaluate the impact of research on scientific thought, society, and the environment and describe the connection between chemistry and future careers.
5. The student will differentiate between physical and chemical properties of matter, investigate and identify properties of mixtures and pure substances, and use the periodic table to make inferences about chemical behavior.
6. The student will identify and measure energy transformations and exchanges involved in chemical reactions.
7. The student will describe the existence and properties of subatomic particles, analyze stable and unstable isotopes and summarize the historical development of the periodic table to understand the concept of periodicity.
8. The student will describe the interrelationships among temperature, particle number, pressure, and volume of gases.
9. The student will identify characteristics of atoms involved in chemical bonding and investigate and compare the properties of ionic and covalent compounds.
10. The student will compare fission and fusion reactions in terms of masses of the reactants and products and the amount of energy released in the nuclear reactions. The student will also investigate elements to determine half-life and evaluate the commercial use of nuclear energy and the medical use of radioisotopes.
11. The student will identify common elements and compounds using scientific nomenclature and demonstrate the use of symbols, formulas, and equations in describing interactions of matter.
12. The student will analyze and measure common household products using a variety of indicators to classify the products as acids or bases.
13. The student will develop general rules for solubility through investigations with aqueous solutions and evaluate the significance of water as a solvent in living organisms and in the environment.
D. Text and Required Supplies

1. Textbook: Addison-Wesley Chemistry and CD-ROM Chem ASAP!
2. Class supplies: 3 ring binder (for chemistry only)
   - Set of 5 Dividers
   - Package of graph paper
   - Lab supplies of small hand towel and liquid hand soap will be divided among lab partners

E. Grading Plan

Grade percentages are in accordance with local grading policy and work done in this course will be weighted as stated below:

**Six Weeks Grades**

- Minor Assignments 50%  
  (In Class Assignments, Homework, Quizzes, and Labs)

- Major Assignments 50%  
  (Unit Exams and project)

**Semester Grades**

\[
\text{Six Weeks Grades} \quad 27.27\% \text{ for each six weeks (} 27.27\% \times 3 = 81.81\%) \\
\text{Semester Finals} \quad 18.19\%
\]

\[
81.81\% + 18.19\% = 100\%
\]

**Minor Assignments:**

These assignments will include some in class daily assignments, quizzes, labs, and notebook checks. A minimum of seven grades will be recorded in this category each six weeks.

**Major Assignments:**

These assignments will include some curriculum based assessments, unit exams, and benchmark exams. There will be a minimum of three recorded grades in this category each six weeks.

**Semester Final:**

The semester final will be a comprehensive curriculum based assessment and will be administered according to the schedule that is released at the end of the semester.
Late Work:
Assignments will be accepted for one day after the teacher has notified the student that the assignment is late with the maximum possible grade being 70%. It is required that late work be submitted directly to the teacher. It should NOT be placed in a mailbox or under a door.

Make up work: it is the student's responsibility to schedule a make-up test and request make-up work after absences. A student who does not make up assigned work (both long and short term) within the time allotted by the teacher will receive a grade of zero. Homework and assignments are due if the student is on campus at any time during the day of absence form class (ie The student leaves school at 7:45 for an UIL event; s/he must turn in the assigned work BEFORE leaving or AFTER returning THAT SAME DAY. Turning the assignment in on the following day will result in a late grade). I will assign a reasonable time period during which students will complete project; absence on the last day of this time period does not excuse the student from turning the project in on or before the due date.

Academic dishonesty includes cheating, copying the work of another student, plagiarism (intentional and unintentional), and any unauthorized communication between students during an examination. The determination that a student has engaged in academic dishonesty shall be based on the judgment of the classroom teacher or other supervising professional employee, taking into consideration written materials, observation, or information from the students. Students found to have engaged in academic dishonesty shall be subject to disciplinary and or academic penalties.

F. Attendance

Missed labs will be made up on Monday or Thursday afternoons. It is very important to schedule appointment when possible during another time. Attendance is an important aspect of student success. Research has demonstrated that student success and class attendance are directly correlated therefore students are expected to attend class on a daily basis. The districts attendance policy is available for viewing at http://www.palestineschools.org.

G. General

Students recorded grades are available for your viewing at a time that is convenient for you. If a parent is interested in reviewing a student’s grades and attendance record online through Skyward Family Access they should request the web address and password from the main office.
Academic dishonesty includes cheating, copying the work of another student, plagiarism (whether intentional or unintentional), and any unauthorized communication between students during examinations. The determination that a student has engaged in academic dishonesty shall be based on the judgment of the classroom teacher or other supervising professional employee, taking into consideration the written materials, observation, or information from the students. Students found to have engaged in academic dishonesty shall be subject to disciplinary and or academic penalties.

H. Classroom Rules of Conduct

1. All safely rules will be strictly enforced. Failure to follow safety guidelines will result in removal from the lab.
2. Students are to respect all members of the classroom community.
3. Students should come to class prepared to learn.
4. Students will be counted tardy if they are not in their assigned seat when the bell rings. After fifteen minutes a student is counted absent.
5. Students should always put forth their very best effort.
   FAILURE IS NOT AN OPTION!!!