Chemistry Syllabus

Chemistry

10 units Grade Level 10 – 12 (A-G “d” Laboratory Science)

Course Description: Chemistry is a rigorous standards-based college prep course that introduces students to chemistry. Students will participate in both class and laboratory activities. Students should expect frequent homework and other assignments that will need to be completed outside of class. Students should be comfortable with scientific calculators, algebra, and unit conversions.

Prerequisite: Completion of Algebra II with "C" or better or concurrent term enrollment in Algebra II, and instructor approval.

Course Goals

* Students will understand the board meaning of Chemistry and how processes around us relate to one another.
* Students will build and expand on skills such as: studying, organizing, inquiring, thinking, speaking, and scientific writing.
* Students will develop high-level problem-solving skills.
* Students will relate the macroscopic properties of matter to an understanding of the microscopic properties that underlie chemistry.
* Students will learn the vocabulary of chemistry, including rules for naming compounds and ions.

Units of Instruction

Atomic Structure

Chemical Bonding

Stoichiometry

Gases

Solutions

Thermodynamics

Rates of Reaction

Equilibrium

Acids & Bases

Nuclear Chemistry

Grading Structure

Notebook/Assignments 20% of grade

Assignments will include things such as problems from the textbook, worksheets, and class work. These will all be kept in your laboratory notebook. The notebook itself will also be periodically graded.

Benchmark Tests/Final 40% of grade

Benchmark tests will be given at the completion of each unit. Additionally, a written final, containing multiple choice, short answer, essay, and/or mathematical questions will be given.

Lab Reports/Projects 20% of grade

Periodically you will be assigned a project or lab report. The project will focus on content from one of the major chemistry units. Most project work will be completed outside of the classroom. Creativity will be highly encouraged. Additionally, you will be required to prepare written formal reports for selected labs and one research paper. More detailed descriptions and due dates will be given in class.

Quizzes 20% of grade

Quizzes will be given on a regular basis, usually at the beginning of class. Most will be announced ahead of time, and some will be “pop” quizzes.

REQUIRED MATERIALS

Pens – multiple colors preferred

Pencils

Highlighters – multiple colors

Eraser

Scientific calculator

Notebook – 9.75 x 7.5-inch, composition, sewn binding

General Expectations

1) All River City High School rules and regulations will apply.

2) No gum allowed.

3) Use or display of electronic devices is not allowed, except when use is permitted by teacher for classroom activities.

4) No hoods or hats may be worn in class.

5) Backpacks must be placed on desk hooks or be kept on the floor. They may not be on the desks, tables, or in laps.

6) No food is allowed, except when food is a part of class activities. Liquids may be consumed only with teacher permission.