College Preparatory Chemistry

Upward Bound
Joshua P. Keaton, Instructor
Email – jkeaton@unhupwardbound.org

Description -

This is a class designed to help you succeed in college preparatory chemistry next year. This course will focus on the metric system and unit conversions, chemical nomenclature, chemical bonding, and chemical reactions. I want to focus on the big ideas in chemistry and what most students struggle with.

Course Objectives - In our study of the chemistry this summer...

- 1. Students will develop the critical thinking skills and the science literacy that is necessary to become informed members of our technological and society. "Chemistry is the Central Science."
- 2. Students will understand that safety skills apply to the laboratory, the workplace and everyday life.
- 3. Students will develop abilities necessary to do and understand scientific inquiry.
- 4. Students will build an understanding of the structure and properties of matter.
- 5. Students will build an understanding of the regularities and classification used in chemistry.
- 6. The student will build an understanding of energy changes in chemistry
- 7. The learner will develop an understanding of chemical reactions.

Expectations - Instructor:

I will do my best to treat each of you fairly, to help each one of you succeed, and to make the class interesting and relevant to you. My hope is that you will gain a better understanding of yourself and how chemistry relates to you and the world around you.

Students:

I will expect you to be on time everyday and to be prepared for class. You will be expected to try your best on all assignments to succeed. In addition, you will be expected to follow the

"NO DISCOUNT POLICY." This means to be courteous, considerate and value ourselves and others. We must recognize that this is a goal that must be worked towards. When someone is "discounted" we are not fostering their self esteem. Simply saying "No Discount" will remind us that it is unacceptable to say such things. This policy is a tool to make our class a more comfortable place to be. This policy applies to everyone including myself.

Grading -

The grading structure is meant to help the students determine their own grade as much as possible. The student who is well motivated and conscientious about assignments will succeed in this course. This course is intended to prepare students for a college prep chemistry class. Grades will be determined on a point's basis. Points can be earned by carefully reading assignments and giving it your all. The longer the assignment, the more points it is worth. Here's how the assignments work.

Quizzes

Quizzes are given almost everyday and intended to measure mastery of the concepts presented. They may have multiple questions or only one or a few.

Homework & Activities

Homework assignments are subject to collection and grading to ensure understanding or simply checking to be sure the work is complete. Homework is checked every few days.

Laboratory Work & Classroom Participation

Since I believe "Science" is a verb, we will be doing many handson Laboratories. Reports and conclusions on these activities or other projects/reports will be evaluated in this category. Since participation involves presence, items such as tardiness or absence will be evaluated in this category. We will be doing a good deal of group work which will also be evaluated in this category.

Homework - Since it is important for a student to keep up with daily work,

Homework will not be accepted late. Homework will be graded as:

a plus 100% credit earned a minus 70% credit earned

a zero not done or weak attempt at the assignment in the

INSTRUCTOR'S opinion; 0% credit earned.

Late -

Since there is a nightly assignment, late or incomplete homework is not accepted for credit. Lab reports have a due date that is announced in advance. They will be accepted late only if the student and teacher negotiate in advance of the due date.

Attendance -

In an activity based course such as chemistry, a student's presence is necessary for you to do well. Every time a student misses class they miss out on material that can never be made up such as group interaction, discussion or unique questioning. It is truly the student's loss!

Math - This is an algebra based course and students must have a Scientific Calculator.

Lab Reports -

If assigned to write a "Formal Lab", follow the established format (see handout). A grading rubric will be announced in advance to allow the student to understand how the lab report will be evaluated by the teacher.

Extra Help - My office hours will be during LTM on

Wednesdays & Fridays during L2S

Feel free to approach me with your questions or concerns. They will always do their best to help you succeed in your study of chemistry!

Vocabulary – Chemistry

In quiry

Matter

Conservation of Matter Chemical Property Physical Property

Mixture – Homogenous and Heterogeneous

Atomic Theory

Sub-atomic Particle (Proton, Neutron, Electron)

Metal Nonmetal Semi-Metal

Factor Labeling & Metric System (SI Units)

Ionic Bond vs. Covalent Bond

Valence Electron Chemical Reaction

Acid & Base

Success in Chemistry is dependent on making academics your first priority. You can do it if you are motivated!!