**General Chemistry: Course Syllabus**

Welcome to Chemistry! Course Website: <http://pvchem.weebly.com>

 Or otherwise specified

**Course Description:**

How do we know anything about the tiniest components of matter when we can’t see them directly? How can our observations at the human scale tell us what must be true at a subatomic scale? In our chemistry class, we will learn to do the work of a chemist so that we can understand how scientists made (and continue to make) these discoveries. We will begin by developing a particle model of matter and seeing how we can use it to describe, explain, and predict observable phenomena. As we encounter more complex situations, we will do experiments that allow us to “upgrade” our model with new features. Some topics that we will explore throughout the year include density, states of matter, energy storage and transfer, describing and sorting substances, counting particles that are too small to see, the internal structure of atoms, chemical changes, and making predictions about the quantities of substances involved in a reaction. This class will be filled with activities, experiments, and student discussion as we work together to develop our own ideas about the nature of matter.

More specifically, we will build our knowledge of the smallest particles of matter through these nine units:

|  |  |
| --- | --- |
| Unit 1: Describing MatterUnit 2: Energy and States 1/ Gas LawsUnit 3: Energy and States 2/ Energy Transfer and StorageUnit 4: Bonded Particles – Describing SubstancesUnit 5: Counting Bonded Particles – the Mole | Unit 6: Chemical Bonding/ NamingUnit 7: Chemical Reactions and EnergyUnit 8: StoichiometryUnit 9: Molarity and SolutionsUnit 10 (if time): Acids and Bases |

**What does all of this mean for you??** In order to be successful in this course, you will need to:

1. Be an active learner: Pay attention, take notes, ask questions, participate, discuss, debate, think, etc.
2. **It’s OK to think, share ideas, and even to be wrong sometimes.**
3. Be a responsible student. Bring your supplies to class each day. Show you are really striving to understand and learn by being a contributing group member when working with your peers and proactively seeking help when you have questions. Be an honest worker: copied work whether it is homework, a quiz, or a test does not help you to learn chemistry and will not be accepted for credit.
4. Do the things respectful people do. Be in your seat ready to work when the bell rings, listen while others are speaking. Keep cell phones and music devices put away. Keep trips that take you out of class to a minimum. Do not bring food or drink other than water to a chemistry class.

Classroom dialog is a vital part of our learning process. We expect you to do your part in promoting an atmosphere where ideas and questions can be freely shared. White boarding is a very big part of this class. Everyone will present information to the class using the white boards. All students need to pay attention to the presentations to understand the concepts of chemistry. Everything we study in class will be tests, so the notes you take and the worksheets will be used as you review for tests. Your attendance and attention are the keys to your progress. Be in class on time each day and make up work you will miss due to absences.

**Required Materials:**

The following materials are to be brought to class each day. Periodic supply checks will be conducted.

1. 1.5 or 2- inch 3-ring binder with divider tabs

2. Pencil

3. Paper

4. Scientific Calculator (TI-30X IIS recommended)

 Note: graphing calculators are not allowed on test days

 Cell phones do not count as a calculator and cannot be used as one

5. Proper attire on lab days: closed-toed shoes, hair tie for long hair (Safety goggles and aprons will be available)

****6. Additional Resource: Textbook available upon request

**Grading Procedures:**

Grades will be averaged from a variety of assignments such as homework and labs (30%), assessments (70%), and formative assessments. Late assignments will be accepted for partial credit until the day of the test over the material covered in the assignment.

Grades will be updated and calculated on the Portal. You and your parents can access information about your grades by logging in there.

The grading scale used will be the official PVHS scale to the right.

Semester grades will be calculated by weighting each quarter at 44% and the semester exam at 12%

**Attendance Policy:** All students are required to attend class.

Unplanned Absence: If a student misses class, it is his or her responsibility to obtain the material missed from the teacher. A student who misses an in-class activity, quiz, or test will need to make it up during 8th period Resource. Each student will have two days to make-up work for each day missed. When handing in make-up work from an absence, please mark “absent” at the top of the assignment.

Planned Absence: If a student knows in advance that he or she will miss class, arrangements about missing work need to be made prior to the absence. In some cases of planned absence, work will need to be completed and submitted prior to the absence, so planning ahead and good communication is very important.

**Extra Help/Chemistry Study Table**

If, at any time, you need chemistry help, please let your teacher know. We are more than willing to meet with you during 8th periods and will probably have some suggestions for you about where you can find other additional help or resources, too. Never be afraid to ask for extra help. You may be assigned to an 8th period Chemistry Study Table if your grade falls below a 65%. We all want you to be successful!

Mr. Hoffman Ms. Vandersee Mrs. Moritz

Advice from former students!

*Here’s what real previous students of ours wanted to tell you about learning and doing well in chemistry*

|  |  |  |
| --- | --- | --- |
| Participate and ask questions in classroom discussions because that's when most of my understanding happened. | Pay close attention and keep all the worksheets that are given out! :) | At first the class might seem confusing but as it goes on things will clear up and you will form a rhythm within the class. |
| Work together in class! | Work at tables with everybody in your class at some point, and actually work collaboratively with them as opposed to sitting next to them and working separately  | Work hard, be dedicated and continue to want to learn about chemistry because it is a fun yet interesting class. |
| I would tell them even if it seems confusing at first, putting in the extra time, effort and sticking it out will really make a difference. | Just because you are not taught how to do it at first, doesn't mean that you shouldn't try to solve it with what you already know.  | Don't give up / get frustrated when you can't get something the 1st, 2nd, 3rd, or even 4th time. You'll get it.  |
| Do your homework. Don't wait until he/she goes over it in class unless you actually understand it. There is no point to copy answers to something you don't understand. Also ask questions if you don't understand something. | Study the worksheets. They are very similar to the tests. Pay attention to the white board meetings as well, because sometimes the students explained stuff that helped me understand things better. | Always try your hardest on the hw. Don’t read to study -- actually do problems. ALWAYS go in for extra help-- even if you feel like you do it too much. |
| Keep your binder organized | ChemisTRY | Make sure to take advantage of eighth period. [They are] very helpful and willing to explain things if you take the initiative |
| Don't sleep during molar mass unit | Always keep a periodic table and a calculator with you | Learn molar masses of frequently used elements. It saves a lot of time. |