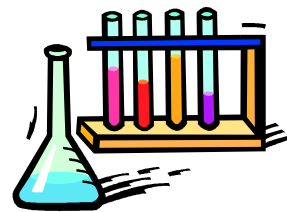


**Valencia High School  
Chemistry A - Syllabus  
Mrs. Peterson**



**Welcome to Chemistry at Valencia High School!** In this class you will learn chemistry fundamentals through various media as well as obtain challenging and interesting hands-on experience in the laboratory. This class syllabus contains some of the information necessary for you to have the best possible learning experience in Chemistry. You and your parents need to carefully read the following policies, *sign* and return the attached form.

### **Course Introduction**

Chemistry is a year long **college-preparatory** science class which is designed to meet the “F” requirement of the University of California, and which promotes interest in Chemistry through laboratory inquiry and investigation. Learning will take place through lectures, reading the textbook, interactive computer programs (on-line textbook), videos, laboratory experiments, research projects, high interest reading articles, investigating relevant internet sites, homework, quizzes, and tests.

### **Course Outline**

- Introduction to Chemistry (Ch. 1)
- Matter and Change (Ch. 2)
- Scientific Measurement (Ch. 3)
- Atomic Structure and the Periodic Table (Ch. 4)
- Chemical Names and Formulas (Ch. 9)
- Moles (Ch. 10)
- Chemical Reactions (Ch. 11)
- Stoichiometry (Ch. 12)
- States of Matter (Ch. 13)
- Behavior of Gases (Ch. 14)
- Thermochemistry (Ch. 17)
- Electrons and Atoms & Periodicity (Ch. 5 & 6)
- Ionic and Covalent Bonding (Ch. 7 & 8)
- Acids, Bases, and Neutralization (Ch. 19)
- Solutions, Reaction Rates, and Equilibrium (Ch. 16 & 18)
- Oxidation and Reduction (Ch. 20)
- Nuclear Chemistry (Ch. 25)

### **Textbooks and Other Materials**

#### **A. Textbook**

Chemistry by Wibraham, Staley, Matta and Waterman, Addison Wesley Publisher, 2007.

We are fortunate to have a set of books for classroom use so you do not need to bring your texts to school. However, if the class books are mistreated, you will be required to bring your own text to class. Please take extra good care of your textbook, as you will replace any book lost or damaged. The replacement cost is **\$90 dollars**.

#### **B. ChemASAP Interactive Tutorial (online)**

Students will be instructed on how to access the textbook online which includes worksheets as well as ChemASAP, a program that incorporates interactive tutorials, practice quizzes, and simulated experiments for each chapter.



#### **C. Guided Reading and Study Workbook**

Students may request a hard copy of the workbook for use as additional study aids. This resource is also available for printing directly from the internet.

#### **D. Calculators**

It is suggested that students purchase a non-programming scientific calculator for chemistry calculations, quizzes and tests (example: Texas Instrument TI-30Xa. This is the calculator model used in class). It is helpful to practice problems with the same calculator used during tests and quizzes. **No programmable or graphing calculators will be allowed during examinations.** Classroom calculators are available to use during class only and are not to be taken home.



## E. Notebook

A three-ringed binder is required. Notebooks need to be with you everyday and will be periodically checked. Pages torn from a spiral notebook will not be accepted for homework. The binder will be organized by five dividers by work description:



1. **Homework log/Warm-ups** – students are required to keep a weekly homework log which will be checked periodically
2. **Lecture Notes**
3. **Assignments**
4. **Labs/Activities**
5. **Tests/Quizzes**

Notebooks should be brought to class everyday. There will be notebook checks/quizzes throughout the semester.

**Organization is the key to success in this class!** The final exam for the first semester is cumulative; therefore it is helpful to have your work organized. Also, **DO NOT THROW ANY PAPERS AWAY FROM THE FIRST SEMESTER** – the information will be used in the spring semester.

## F. Supplies

Pencils, pens (black, blue and red) for note-taking and notebook paper. Additionally, you will need to purchase index cards. **The cards must be bound with a ring – NO rubber bands.** These will be used to memorize chemistry vocabulary and chemical names. The first items you need to place on your cards are the polyatomic-ion names and their charges. Please see attached page.

### Grading System

<u>Grading Scale</u>	<u>% Grade Breakdown</u>	
A 90-100%	Tests/Quizzes	45%
B 80-89%	Labs/Projects	15%
** C 70-79%	Assignments/Participation	20%
D 60-69%	Midterm Exam	5%
F below 60%	Final Exam	15%

\*\*Chemistry is a course that builds from one topic to the next, therefore *students who do not have a 70% or C- will not continue in Chemistry second semester.*

### Extra Credit

Extra credit will be available from time to time. However if extra credit is given, it is in addition to the regular class work and can only raise a grade by a maximum of 5%. Extra credit will be added into the grades as it occurs (see Chemical Abstract Format for more information).

### Attendance and Homework Policy

Homework must be ready to turn in before the tardy bell rings. Homework due dates will be given in advance, therefore no late work will be accepted.

If you have an **excused** absence, homework is due the day following your return. If an exam, quiz or laboratory experiment was missed due to an excused absence, the make-up time (within the week) will be announced. **YOU** are responsible for clearing your schedule to make up tests and quizzes during the lunchtime scheduled for make-up tests and quizzes. If you cannot attend the make-up, **YOU** are responsible for contacting Mrs. Peterson before Friday of that week to arrange a time to make-up the test/quiz/laboratory experiment.

Because each day of instruction builds on the previous day, your attendance is directly related to your success in this course. Missing one day can cause your grade to be adversely affected. If you know ahead of time when you will be absent, please notify the teacher. **YOU** are responsible for obtaining any missed homework assignments and worksheets and making up missed quizzes/tests. This information is available in the Absent Binder on the center lab table. The school attendance policy is in effect for this class.

## **Classroom Management**

- Courtesy and respect among students and teacher is required.
- Learning science includes collaborative discussion, however only at the appropriate time. Students will show respect by listening attentively to each other.
- Take care of school equipment and facilities. Never touch lab materials without previous permission.
- Be in your desk, ready to work when the tardy bell rings. The school's tardy policy will be enforced.
- Any form of copying or cheating will result in a zero for the assignment or test AND parent notification. Cell phones and pagers must be left in backpacks in the lab area during tests. Possession of a cell phone or pager during a test will result in a **zero for the test**. The school's cell phone policy will be followed.
- Absolutely NO food, drink or gum is allowed in the classroom.
- Any student causing a **hazardous condition**, especially during lab time, will be dismissed from the class. Your safety and the safety of those around you are of primary importance!

## **Communication**

I email updates and study tips every week to anyone who requests to be placed on my email list. Lesson plans and grades (Adobe Acrobat) are updated approximately every other week on my website. If you and/or your parents would like to be placed on my mailing list you must either 1) sign up in class, 2) provide your email address on the required signature page (yellow), or 3) send me an email at [speters@hartdistrict.org](mailto:speters@hartdistrict.org) from the email account that you would like to receive the email updates, and 3) include my email address in your email account address book so that my email is not blocked by your server.

You can reach me for questions or assistance during 3<sup>rd</sup> period (9:02-9:57) or after school. Feel free to call me at 294-1188 ext. 207 or send me an email at [speters@hartdistrict.org](mailto:speters@hartdistrict.org). I am looking forward to exploring chemistry together with you this semester!

I also have a website that contains the weekly lesson plans, lectures/notes, homework assignments and grades. Grades are updated approximately every two weeks. You can visit the website at <http://staff.hartdistrict.org/speters/>.

## **Science Department Academic Integrity Policy**

The Science Department at VHS will consistently enforce the William S. Hart Union High School District Board Policy on Academic Integrity, which is based on Education Code 44806. Examples of academic dishonesty that violate the Academic Integrity Policy include:

A student who takes credit for someone else's work by copying any portion of someone else's work or allows someone else to copy their work.

Students who are working in a group do not do all the work for which they are given credit.

A student who looks at another student's paper during a quiz or test.

A student plagiarizes someone's work, whether it is another student's paper or a resource material.



Parents of students who have been academically dishonest will be notified of the event and a report will be filed in the student's permanent records in addition to any teacher-imposed consequences for cheating (e.g. no credit on the assignment). At the teacher's discretion, a student can be removed from the class for two days for misbehavior, including academic dishonesty, according to California Education Code.

### **William S. Hart UHSD Cell Phone and Pager Policy**

The William S. Hart Union High School District acknowledges the importance of communication between students and parents, particularly in emergency situations. Further, the District recognizes that instructional time is precious and school time must be protected from unnecessary disruptions.

Therefore, students may be permitted to have a cell phone or pager in their possession on campus during the school day, or while attending school-sponsored activities, or while under the supervision and control of a school district employee. Students shall be allowed to possess and use cell phones or pagers while under supervision of the school with the following parameters:

- A. Cell phones and pagers are to be turned off and put away upon arriving to class or before entering any school building.
- B. Authorization for student possession or use of a cell phone or pager may be revoked by the administration for inappropriate student use.
- C. The District assumes no liability for the damage, loss, or misuse of the cell phone or pager by the student or another person.
- D. Students are expected to immediately comply with the direction of any school personnel to cease the use of a cell phone or pager on campus or at a school sponsored activity.
- E. Failure to comply with this policy may result in confiscation of cell phones/pagers by school personnel.

*Legal Reference:*

EDUCATION CODE

48901.5 Electronic signaling devices

Policy adopted: 1/29/03

### **Mrs. Peterson's Cell Phone, Pager, Camera Policy – Consequences of Misuse**

The William S. Hart Union High School District Cell Phone and Pager Policy is in effect in my classroom. Because electrical devices can result in wide-spread cheating (sharing answers, photographing tests) students are not allowed to carry these devices on their person during a test. Consequences for misuse of a cell phone, pager, camera or any electronic device that sends signals in my classroom are as follows:

- A. Cell phones, pagers, cameras or electrical communication device use during classroom learning time will result in device confiscation. The device will taken to the office. **First offense:** The student may pick up the device at the end of the day. **Second offense:** The student's parent must pick up the device.
- B. Cell phones, pagers, cameras or electrical communication devices will be placed into zippered backpacks during tests. The backpacks containing these electrical devices must then be left in the lab area until the end of the hour.

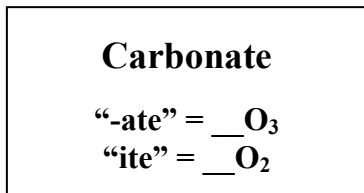
Any electrical device (other than a scientific calculator) **found on a student during the test hour will result in a ZERO on the test.** It does not matter if the device is turned off, the consequences will still be enforced.

### Polyatomic Ion Names – Index Cards

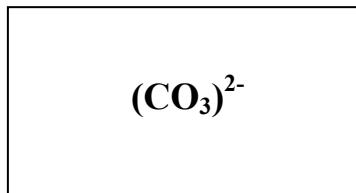
On the front of the card write the name of the polyatomic ion and the rule for naming the polyatomic. On the back of the index card write the formula with the charge.

For Example:

Front



Back



You will be tested on your polyatomic ions every week. Each quiz will include the 5-6 new ions plus ions from the previous weeks. After five weeks, you will be quizzed on the entire list. Knowing polyatomic ions is **crucial** to your success in chemistry.

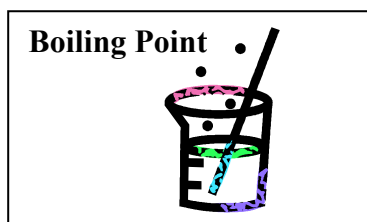
(1-) charge		(2-) charge		(3-) charge	
Formula	Name	Formula	Name	Formula	Name
H <sub>2</sub> PO <sub>4</sub> <sup>-</sup>	Dihydrogen Phosphate	HPO <sub>4</sub> <sup>2-</sup>	Hydrogen Phosphate	PO <sub>4</sub> <sup>3-</sup>	Phosphate
C <sub>2</sub> H <sub>3</sub> O <sub>2</sub> <sup>-</sup>	Acetate	C <sub>2</sub> O <sub>4</sub> <sup>2-</sup>	Oxalate	PO <sub>3</sub> <sup>3-</sup>	Phosphite
HSO <sub>3</sub> <sup>-</sup>	Hydrogen Sulfite	SO <sub>3</sub> <sup>2-</sup>	Sulfite		
HSO <sub>4</sub> <sup>-</sup>	Hydrogen Sulfate	SO <sub>4</sub> <sup>2-</sup>	Sulfate		
HCO <sub>3</sub> <sup>-</sup>	Hydrogen Carbonate	CO <sub>3</sub> <sup>2-</sup>	Carbonate		
NO <sub>2</sub> <sup>-</sup>	Nitrite	CrO <sub>4</sub> <sup>2-</sup>	Chromate		
NO <sub>3</sub> <sup>-</sup>	Nitrate	Cr <sub>2</sub> O <sub>7</sub> <sup>2-</sup>	Dichromate		
CN <sup>-</sup>	Cyanide	SiO <sub>3</sub> <sup>2-</sup>	Silicate		
OH <sup>-</sup>	Hydroxide				
MnO <sub>4</sub> <sup>-</sup>	Permanganate				
ClO <sup>-</sup>	Hypochlorite				
ClO <sub>2</sub> <sup>-</sup>	Chlorite				
ClO <sub>3</sub> <sup>-</sup>	Chlorate				
ClO <sub>4</sub> <sup>-</sup>	Perchlorate				
<b>(1+) charge</b>					
NH <sub>4</sub> <sup>+</sup>	Ammonium				

### Vocabulary Words – Index Cards

On the front of the index card write the vocabulary word and a picture of the concept. On the back of the index card write the definition for the word in your own words.

For Example:

Front



Back

**The temperature and pressure at which the kinetic energy of liquid particles overcomes the intramolecular attractions.**

The vocabulary words for each chapter can be found on the last page of the chapter. It is important that you start learning the vocabulary words for each chapter the first day the chapter is lectured on in class. As I lecture over the particular chapter, the vocabulary words will be integrated into the quizzes for that chapter. The test for each chapter will include all the vocabulary words for that chapter.

