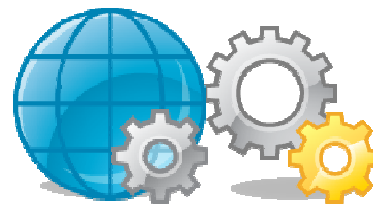


Valencia High School
Material Science B – Course Syllabus
Mrs. Peterson



Welcome to Material Science at Valencia High School! In this class you will learn the chemistry behind materials and 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 Material Science. You and your parents need to carefully read the following policies, *sign* and return the attached form.

Course Introduction

Material Science A/B is a 2-semester course that meets graduation requirements as a Physical Science with general elective credit. Fulfilling a part of the Engineering curricular path, the course is a college A-G science option. Material Science is a multidisciplinary approach to science and technology that teaches students to better understand the properties and uses of materials. It combines scientific theories, practical applications of technology, **significant hands-on laboratory experiences** (two labs per week), and **technical report writing** to prepare students to work in a technologically rich environment.

Course Outline – What units will we cover this semester?

- Polymers
- Ceramics
- Composites
- Solids (overview)
- Metals (overview)

Textbooks and Other Materials

A. Textbook

Material Science published by Energy Concepts, Inc., 2007.

These textbooks/laboratory manuals will be used in the classroom and will be kept in the classroom. The Student Journals for each of the five units will be provided to the students and will be used for entering experimental data, completing homework questions and writing and student .

B. Student Journal

Each student will be provided Student Journals for each of the five units (Solids, Metals, Polymers, Ceramics, and Composites). These journals will be used as a place to document classroom activities (experimental data and observations), notes, and journal writings. A “Task Sheet” will be a part of each journal to encourage students to record lab completion dates and scores as is expected in industry.

C. Additional Textbook

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

We will be spending one day per week on a general overview of the second semester of chemistry preparing students for the STAR Chemistry Test. We are fortunate to have a set of books for classroom use. Additionally access to the publisher’s online textbook will be provided to each student.



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 collected for grading. Pages torn from a spiral notebook will not be accepted for homework. The binder will be organized by five dividers by work description:

- a. Homework log/Warm-ups
- b. Handout Lecture Notes
- c. Assignments/Article Responses
- d. Labs/Activities
- e. Tests/Quizzes

Notebooks should be brought to class everyday – it will be collected throughout the semester for grading.



Organization is the key to success in this class! The final exam for the second semester is cumulative for the entire year; therefore it is helpful to have your work organized.

F. Supplies

Pencils, pens, 4 different-colored pencils or pens (for note-taking) and notebook paper.

Grading System



Grading Scale

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	below 60%

Percent of Grade Breakdown

Tests/Quizzes	30%
Labs/Projects	30%
Assignments/Participation	20%
Final Exam	10%

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).

Extra credit will NOT be accepted after **May 22nd, 2009!**

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 bell rings. The school's tardy policy will be strictly 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 (blue), or 3) send me an email at 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 4th period (10:38-11:33) or after school. Feel free to call me at 294-1188 ext. 207 or send me an email at speters@hartdistrict.org. I am looking forward to continuing to explore 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.