### CHEMISTRY SYLLABUS

Instructor: Mr. Rosen Room No. 7 Conference time: *Period 2* Email: <u>rosen@hillsidelc.org</u> Website: <u>http://www.jeremyrosen.weebly.com</u> Phone #: 818-807-6121

### **COURSE DESCRIPTION**

This course seeks to create a supportive environment that fosters collaboration, questioning, and investigation amongst the students. Using the basic processes of scientific inquiry we will study the physical world, from the properties and structures of matter to the chemical structures of elements, molecules, and compounds. The periodic table of elements will be referenced to throughout the course while the proper symbolic nomenclature of elements as well as the symbolic representation of chemical reactions in formulas and equations will be learned. Atomic structure, properties of salts, acids and bases, redox and nuclear reactions, all this will be covered in this challenging class, and by a variety of methods including simulation, video, traditional and hands-on approaches.

## DAILY AGENDA

The daily agenda and up-to-date class information can always be found by going to my personal teaching website <u>http://www.jeremyrosen.weebly.com</u>. If you miss anything or are absent you can go there to see what needs to be turned in. A history of everything done in the classroom for the entire school year can be found on this website with the most recent posts found at the bottom of your subject and the oldest at the top (Hover over "Hillside High" at the top and then click on the subject you are enrolled in (geology, chemistry, biology, Jr. High Science, and Physics)). On my website are included many additional links to resources, tutorials, simulations, videos, examples of class work, etc... it is my advice to get familiar with this website from the very beginning. It is every student's responsibility to make-up any missed assignments and/or quizzes/tests.

## **COURSE TEXTBOOK**

World of CHEMISTRY- *Zundahl & DeCoste,* Mcdougall Littell, 2002 Student website to accompany the text: <u>http://www.classzone.com/cz/books/woc\_07/book\_home.htm?state=CA</u>

#### CLASSROOM RULES:

- No electronics unless being used for class purposes
- No food/drinks in the classroom. Water bottles are allowed.
- · Be respectful to others in the classroom
- · Do your best to maintain a positive attitude and assist those around you
- Progressive consequences for non-compliance (talk with student, talk with parent(s), after-school detention, refer student to administration)

A = 90 - 100 % *	Assignments *	20 %	*(includes homework)
B = 80 - 89	Participation	20 %	
C = 70 - 79	Quizzes/Tests	20 %	
D = 60 - 69	Project/Labwork	20 %	
F = < 60	Midterm/Final	20 %	
F = < 60	Midterm/Final	20 %	

## **Missed class**

It is every student's responsibility to obtain any lecture notes, handouts, worksheets or other important information from the teacher or a fellow classmate as soon as the student returns to school. The daily agenda can also be found on my website.

# Late Work:

For full credit all assignments should be turned in on time unless you have an excused absence. Assignments will be accepted "late" however only for partial credit. The later an assignment is turned in the less credit will be given.

## LABORATORY NOTEBOOK

Labs will familiarize you with skills needed to investigate scientific questions, allow you to establish effective research habits, and reinforce information learned during lecture. Communication is an important part of science, and clearly written lab reports are essential. Laboratory Notebook: You will be expected to write lab reports in your laboratory notebook (see "Laboratory Report Format," below). Notebooks will be. To make scientific progress, it is important for scientists to share information with each other and with the public both orally and in writing.

## Laboratory Report Format

Each lab report should include the following sections:

- Title: What is the activity called?
- Purpose: What do you hope to accomplish, or what is your reason for doing this lab? (Include sufficient background information.)
- Hypothesis: What are you testing with this lab?

• Materials/Equipment: List the materials and/or equipment that you used for this procedure.

• Procedures: Describe how the lab is done (include safety precautions). Be thorough enough to be able to do the experiment again using your lab report as a guide.

• Data and Observations: Record all the information that you collected during the exercise. This should include sensory observations (e.g., the appearance of reactants, the motion of objects). Organize the data in a chart, table, or graph. Include any experimental error determinations, if appropriate. Use the correct number of significant figures. Be as complete as possible.

• Calculations: Show all work and results of any calculations made using the collected data.

• Questions: Answer all assigned questions. Questions may be found in the lab handout or on the board.

• Conclusions: Summarize what happened in the lab and evaluate the results. Use complete paragraphs. Also, tell what you learned by doing this lab.

# Fall Semester (August 12, 2015 to December 17, 2015)

- Aug. 12 Math and measurement in chemistry, scientific inquiry (1 week)
- Aug. 17 Science in Practice (1 week)
- Aug. 24 Introduction to chemistry (2 weeks)
- Sept.14 Properties of Matter and Gases (2 weeks)
- Sept.28 Formulas and Equations (4 weeks)
- Oct. 16 MIDTERM
- Oct. 26 Microscopic Nature of Matter (3 weeks)
- Nov. 16 Atomic Structure and Chemical Bonding (3 weeks)
- Nov. 23 Nov. 23 Thanksgiving Break- no classes
- Dec. 14 Review
- Dec. 18 FINAL