**AP Chemistry Syllabus**

**Mira Costa High School**

**Contact Information:**

Course Website: mrsnielsenscience.weebly.com

 Email: tnielsen@mbusd.org

 Phone: (310) 318 – 7337 X 5127

**Course Description**

This AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. For most students, the course enables them to undertake, as a freshman, second year work in the chemistry sequence at their institution or to register in courses in other fields where general chemistry is a prerequisite. This course is structured around the six big ideas articulated in the AP Chemistry curriculum framework provided by the College Board with special emphasis on learning objectives that combine content with inquiry and reasoning skills.

**Textbook:** Tro, Nivaldo J. *Chemistry: A Molecular Approach*. 3rd edition, 2013. Upper Saddle River, NJ: Pearson Education, Inc.

**Required Materials:**

* Textbook
* Scientific Calculator
* Bound Composition Notebook
* 3-ring chemistry portfolio (for classwork and homework)

**Expectations:**

* You will come to class prepared. Each day you will bring lined paper, your portfolio, a writing utensil, and a scientific calculator. Being prepared also means coming to class with the mentality that you will accomplish goals set for that day.
* You must arrive on time. Tardies will be kept. If you are not in the room when the bell rings, you will be considered tardy.
* Listen and follow instructions the first time they are given.

**Classroom Rules:**

* **Respect** your teachers and your classmates. Any verbal or physical misconduct will not be tolerated.
* No food is permitted. You may drink **WATER ONLY**. Please do your best to keep the room neat and clean.
* No cellular phones, portable music players, or make-up is allowed in class.
* I will dismiss class each day, **NOT** the bell.

**Grading:**

* Tests and Quizzes = 30%
* Portfolio = 25%
* Laboratory Reports = 25%
* Final = 20%
* A = 90% - 100%
* B = 80% - 89%
* C = 70% - 79%
* D = 60% - 69%
* F = below 59%
* Turn in all work when it is due. I will **not** accept late work.
* Students are responsible for obtaining and handing in work you miss. Students will be allowed one day per day of excused absence to make up what they have missed. Check the website daily for missed work.
* Extra credit assignments may be offered occasionally, but don’t count on it.

\*\*\* Grading in Mrs. Nielsen’s class is largely based on your effort. The previously explained point system will be used as a guideline, but will not be the only factor in determining your grade. If you are willing to put your time and effort into this course, you **will** receive a rewarding grade.

**Tests and Quizzes:**

No make up tests or quizzes will be offered. If a student is absent on the day of an assessment they will receive a score of 0. At the end of the semester, the lowest quiz or test score will be exempted from the students’ grade. The 0 grade due to an absence will be dropped at this time. If a student does not miss any assessments, they can drop the score of their choice that will most benefit their grade. If a student misses more than one quiz or test then one 0 score will be dropped and the other 0 grades will be replaced with the semester final exam grade. If a student knows of their absence in advance, they can make special arrangements with the teacher to take the exam prior their absence.

**Laboratory Reports**

Students are required to keep a will engage in laboratory work for a minimum of 25% of instructional time. AP Chemistry students are required to keep a laboratory notebook as a record of their laboratory experiences. Lab reports are detailed accounts of what occurs in the laboratory and are an extremely important part of the course. Students must follow the lab report format provided and label all sections very clearly. For purposes of safety and time management, it is important that students don’t procrastinate when doing pre-lab and post-lab work. Late labs will be credited with 50% of the earned score. Absent students are responsible for obtaining lab data from another student and completing the lab report on time.

**AP Chemistry Unit Overview**

Unit A: Chemistry Fundamentals

Unit 1: Matter and Atomic History

Unit 2: Chemical Names, Reactions and Stoichiometry

Unit 3: Aqueous Solutions

Unit 4: Gases

Unit 5: Thermochemistry and Thermodynamics

Unit 6: Atomic Structure and the Periodic Table

Unit 7: Chemical Bonding

Unit 8: Molecular Geometry and Hybridization

Unit 9: Liquids, Solids and Intermolecular Forces

Unit 10: Solution Properties

Unit 11: Kinetics

Unit 12: Chemical Equilibrium

Unit 13: Acids and Bases

Unit 14: Redox and Electrochemistry

Unit 15: Nuclear Chemistry

Unit 16: Organic Chemistry

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As an acknowledgment of reading and understanding the course expectations a signature is requested. If at any time you wish to contact the instructor concerning the class or your student’s progress please contact me at your convenience.

STUDENT NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

STUDENT SIGNATURE \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE \_\_\_\_\_\_\_\_\_\_

PARENT SIGNATURE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE \_\_\_\_\_\_\_\_\_\_