# MVLA 2019-20 COURSE INFORMATION SHEET

Course Title: Chemistry Honors (CB2010) School: Mountain View High School UC/CSU requirement: Yes/Yes; Subject Area D, Laboratory Science Textbook and/or other learning resources: Chemistry by Zumdahl and Zumdahl (7th edition)

# Student Learning Outcomes:

Chemistry is the branch of science that deals with the composition of matter and the changes in composition that matter can undergo. In investigating the composition of matter, we will explore the structure of the atom and the ways in which that structure determines the kinds of substances that can be formed. In studying changes in composition, we will integrate this structure with the energy considerations that govern chemical reactions.

# Semester 1

Unit 1 - Intro to Chemistry (Lab Safety, Classification of Matter & Working with Measurements)

- Unit 2 Atomic Structure
- Unit 3 The Mole
- Unit 4 Nomenclature and Periodic Table
- Unit 5 Types of Reactions
- Unit 6 Stoichiometry

# Semester 2

Unit 7 - Thermodynamics

- Unit 8 Electronic Structure and Periodic Trends
- Unit 9 Bonding, Molecular Geometry, Intermolecular Forces
- Unit 10 Equilibrium
- Unit 11 Acids and Bases
- Unit 12 Chemistry in the Earth System (Climate Change, Ocean Acidification & Plate Tectonics)

We place heavy emphasis on strengthening your logical reasoning processes, enhancing your problem solving strategies, and developing your skill in organizing the products of scientific thought and experimentation into coherent reports. As you continue to grow in your ability to use the scientific method in approaching problems, you will become familiar with a wide variety of laboratory techniques.

Assessment and Grading (<u>BP 5121</u> / <u>AR 5121</u>): To ensure that every student has an equal opportunity to demonstrate their learning, the course instructors implement aligned grading practices and common assessments with the same frequency.

- 1. Grading categories and their percentage weights: Each semester will be broken into the following weighted categories:
  - Mastery of Chemistry Content
    - Tests 50%
    - $\circ$   $\,$  Quizzes and Labs 25%  $\,$
    - Final 15%
  - Work Habits 10%
- 2. Weight of assignments/assessments within grading categories:
  - *Mastery of Chemistry Content* will be measured by quizzes, unit exams, projects, labs, and presentations. The *Final Exam* each semester will be a cumulative assessment.
  - *Work Habits* is a combination of class preparedness, homework timeliness, engagement, collaboration, and wise use of revision opportunities.

# 3. Grading scales:

Grades will be determined by the following expectations:

- A 90-100% Student demonstrates mastery with excellence.
- B 70-89% Student demonstrates mastery of grade-level standards.
- C 50-69% Student inconsistently grasps and applies some of the key concepts, processes and skills.
- D 30-49% Student is not yet performing at grade level.
- F 0-29% Little evidence of understanding.

## 4. Homework/outside of class practices (<u>AR 6154</u>):

You should expect to work on Chem H nightly 15-30 minutes. You are also expected to routinely review and process previous work (see Curve of Forgetting, <u>http://uwaterloo.ca/counselling-services/curve-forgetting</u>). The time this takes will vary from student to student and the nature of the task. Reviewing and processing can take a variety of forms, some suggestions are to form a study group, visit the tutorial center or instructor office hour, rework problems, make a quizlet, and interact with notebook content (summarize notes, make connections, ask questions, highlight, add diagrams). <u>Keeping up with work, staying engaged in every class period, and regular review and practicing are essential for success</u>.

## 5. Excused absence/make up practices (Education Code 48205(b)):

If you are absent, it is your responsibility to find out what you missed and return to class prepared. You can contact the instructor (via email), your peers (find a study buddy in Chem H, preferably in your class), or the website/Google Classroom to find out what you missed and/or schedule a time to take an exam or lab missed.

# 6. Academic integrity violation practices (<u>LAHS Academic Integrity Policy</u> / <u>MVHS Academic Integrity</u> <u>Policy</u>):

MVHS Academic Integrity Policy will be enforced. Instructors will be explicit about when your work is collaborative and group-oriented. If not, assume that your work should be your own.

### 7. Late work practices:

Late work will be due by the end of each unit. Consistently turning in work late will affect your work habits grade.

### 8. Revision practices:

Quizzes and lab write-ups are <u>not</u> revisable. One quiz will be dropped at the end of each semester. Students may retake up to three summative assessments in each semester if the score is below 90% (A). Retakes may score up to but not over 90% and will replace the original score.

### 9. Extra credit practices:

One extra credit opportunity will be provided for Mole Day during the fall semester. No other extra credit opportunities will be allowed. Extra credit will be included in the work habits category.

### 10. Additional grading practices:

None

### Instructors' email addresses:

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