LAHS 2024-25 COURSE INFORMATION SHEET

Course Title: Chemistry School: LAHS UC/CSU requirement: 10 Credits Laboratory Science "D" Requirement Textbook and/or other learning resources: Prentice Hall Chemistry

Course Description:

This college preparatory course provides students with a detailed understanding of the fundamentals of chemistry. Chemistry topics covered are: Combustion and Thermochemistry, Atomic Structure, Nuclear Chemistry, Chemical Reactions, Electrochemistry, Chemical Bonding, Stoichiometry, Solutions, Equilibrium, Acids/Bases, Chemistry of Climate Change.

Student Learning Outcomes:

Additional student learning objectives are as follows:

- an understanding of major concepts, theoretical principles and experimental findings in chemistry.
- an ability to work effectively in diverse teams in both classroom and laboratory.
- an ability to employ critical thinking and efficient problem-solving skills.
- an ability to conduct experiments, analyze data, and interpret results, while observing responsible and ethical scientific conduct.
- effective written and oral communication skills, especially the ability to transmit complex technical information in a clear and concise manner.
- the ability to use modern instrumentation for chemical analysis.
- the ability to use computers for chemical simulation and computation.
- a familiarity with, and application of safety and chemical hygiene regulations and practices.

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.

 Grading categories. Students will be graded by how well they attain Learning Outcomes (LO's) and Essential Learning Outcomes (ELO's). Students will attain an LO or ELO when they master the outcome at the 80% level. Each unit will consist of 10 overall LO's of which one of them is essential. Below is a sample unit showing its learning outcomes.

LO 1: Being a scientist (precision vs accuracy, quantitative vs qualitative, asking questions) (QUIZ)

LO 2: Lab basics (safety, equipment, SI units of measurement) (QUIZ)

- LO 3: Measuring with sig figs (QUIZ)
- LO 4: Measuring energy (LAB)
- LO 5: Thermochemistry inquiry (LAB)
- LO 6: Calorimetry (LAB)

LO 7: Thermochemistry Claim, Evidence, Reasoning (QUIZ)

LO 8: Classwork/Participation (EFFORT)

LO 9: Combustion Homework packet (EFFORT)

ELO 10: Use dimensional analysis to convert between joules, kJ, cal, kCal (ESSENTIAL LEARNING OUTCOME)

<u>Typical Unit Breakdown</u> Content Quizzes (40%) Labwork (40%) Academic Readiness (20%)

2. Achievement evidence collected for Learning Outcomes:

- Homework is assigned and reviewed at least several times each week.
- Classwork and participation will be assessed on a daily basis.
- Labs occur on a regular basis and are a critical component of this course.
- Quizzes generally occur 1-2 times a week and reflect the current material being learned.

Grade	LO's Achieved	Percentage %	Grade	LO's Achieved	Percentage %
A+	40	100.01	С	27-24	60-69.9
А	39-38	95-100	C-	23-22	55-59.9
A-	37-36	90 - 94.99	D+	21-20	50-54.9
B+	35	87.5-89.9	D	19-16	40-49.9
В	34-33	82.5-87.4	D-	15-14	35-39.9
B-	32-30	75-82.4	F	13 or less	< 34.9
C+	29-28	70-74.9			

3. Grading scales*:

4. Homework/outside of class practices (AR 6154):

- Homework is assigned regularly (Mon-Fri) and will generally consist of textbook reading, watching videos, problems, lab report writing, and/or worksheets.
- Homework is due on the specified date given by the instructor and will be checked regularly for **completeness**, not correctness. Difficult problems will be reviewed to help with student understanding.
- Chemistry resembles a math class in many ways; therefore, all work must be shown to receive credit.

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

- When **absent**, it is the student's responsibility to find out what activities and concepts were missed. The student is responsible for knowing all material covered for the assessments.
- If students have an **excused** absence on the day of a quiz, it is their responsibility to make arrangements with the instructor regarding a make-up quiz immediately upon return to class.
- Missed labs need to be scheduled for a make-up or alternate assignment.
- Students who fail to show up for a make-up lab will not have the opportunity to make it up again and will not earn credit for that particular Learning Outcome.

6. Academic integrity violation (LAHS Academic Integrity Policy):

Students caught cheating or plagiarizing will get an automatic zero for the particular Learning Outcome, which will be denoted by a "V" in the grade book. There will not be an opportunity to make up the assignment. It is assumed that all work completed for a class is original work created for that class, for a specific assignment.

While there are instances where students may have similar data as their lab partners, all submitted reports must be written in his/her own words for full credit. Homework answers may not be copied from another student or the internet.

Consequences for violations of Academic Integrity are teacher-subjective and may also include: phone calls to parents, meeting with administrators, behavior contracts, mark on the student's academic record, loss of future retake opportunities, and a 10% grade reduction.

7. Late work practices:

- Late homework may be turned in by the end of a unit for partial credit (3/5).
- Late labs or projects may be turned in for full credit up until the teacher specified hard deadline for that Learning Outcome.

8. Revision practices:

- Labs/Projects will be allowed one "rewrite" in order to obtain 80% mastery.
- Students will be allowed 3 attempts to pass a quiz-based ELO.
- Students will be allowed 2 attempts to pass a quiz-based LO.

9. Additional grading practices:

• A summative final will be given at the end of each semester. The final exam will count as 1 LO. This activity will allow students the opportunity to attain bonus LO's based on the following performance table:

Exam Score %	LO's awarded	
90-100	3 (2 bonus)	
75-89%	2 (1 bonus)	
50% or higher	1	

Instructors' contact information:

Trina Mattson:	trina.mattson@mvla.net	Room 701
James Mok	james.mok@mvla.net	Room 702
Elizabeth Pyle	elizabeth.pyle@mvla.net	Room 712

Additional information:

Students are highly encouraged to get help during tutorial if they are struggling in the class. The instructor will help students develop a plan to become more successful in Chemistry.

<u>ABSENCES</u>: An "unexcused absence" is an absence in excess of a 30-minute period occurring in a given class. Students may not exceed 14 unexcused absences across their entire schedule. A full day, unexcused absence counts as 5, 6 or 7 absences depending on how many classes a student carries toward the total of 14. On the 15th unexcused absence, students may be referred to an alternative educational program/site pursuant to the District's involuntary transfer policy (AR/OP 5113).

<u>TARDIES</u>: Students may not exceed 19 unexcused tardies across their entire schedule. An unexcused tardy is an absence from class from when the bell rings until up to 30 minutes of a class period. At the 15th unexcused tardy, there will be a mandatory parent conference with the student's Assistant Principal. This conference will be scheduled to occur the morning after the family is contacted by the school. At the student/parent conference, consequences for continued tardiness are discussed and the student is assigned to Saturday School. An attendance contract will also be signed at this meeting. Failure to attend Saturday School may result in a transfer to an alternative educational program/site.

Classroom Rules:

- For health and safety reasons no eating, drinking, gum chewing or make-up applying allowed.
- Be respectful of others by acting as professionals. This includes being punctual, using courteous language, and showing appreciation to fellow peers and instructors.
- Bathroom necessities should be taken care of before or after class. In the event that you need to go during class, you are responsible for anything you missed and may not cause unnecessary disruption in leaving or returning.
- A chemistry class has special safety considerations. You must always follow the instructor's safety guidelines when performing laboratory procedures. Failure to comply with safety guidelines will result in severe disciplinary action!