Chemistry
2025-2026 Syllabus

Teacher: Mr. John W. Wood
Email: jwood@astecschools.com
Plan Period: 5th Hour
Monday - Friday: 1:02 PM - 1:50 PM
Early Release Monday: 11:50 AM - 12:24 PM
Phone: 405-947-6272
Textbook: Inspire Chemistry
Online Resource:
https://chem.libretexts.org/Bookshelves/General_Chemistry/Map%3A_Chemistry_-_The_Central_Science_(Brown_et_al.)

Course Description: Chemistry is the study of matter, and interactions therein. Scholars will examine atomic structure, solids, gasses, liquids, reaction predictions, chemical bonding, molecular structures and shapes. Chemistry prepares scholars for the science portion of college-readiness tests, for college success and elucidates the fact that we live in a chemical world, full of chemistry! I may ask students to bring certain materials, or chemicals from home to use in class if possible. This is optional, and will be communicated in advance. Materials will be shared among all students and class sections. In general, I will be available after school until 4:30pm in the chemistry lab to assist students, or respond to parent emails/calls.

Course Objectives:

1. Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms.
2. Use the periodic table to assess the density, and mass of elements, and molecules.
3. Use the periodic table, and apply mathematical skills to calculate masses, volumes, and molar amounts required to produce various solutions.
4. Understand the mechanics, and concepts at play in compound molecules, and macroscale items used in day to day life.
5. Explain, describe, and calculate simple reactions and processes using the metric system.
6. Explain, describe and understand the effect of concentration in the pH system of acids and bases.
7. Explain, describe and understand how outside factors will influence a reaction.
8. Explain and calculate how gases behave under different conditions, and in the relationships between thermodynamics and energy.
9. Be able to conduct experiments, and predict the outcomes.
10. Be able to draw chemical structures.
11. Be able to look at a list of ingredients, and be prepared to make general statements about the contents.
12. Be comfortable with the metric system.
13. Understand and appreciate the thermodynamics involved in power plant generation.
14. Understand and appreciate the role of municipal water systems.
15. Understand and explain the role of electricity in electron displacement reactions.

Required Materials:

- Composition Notebooks – one per class; additional notebooks may be needed later in the year..
- #2 pencils and pens - replenished during the year
- One handheld pencil sharpener with a shaving catcher
- Loose-leaf, lined paper. 500 Count to start. Students must replenish as needed.

Attendance Policy and Classroom Expectations:

- All scholars must attend class with the required materials, be on time, and participate.
- Scholars must be present 90% of class time each semester. This means scholars can not miss more than eight days a semester per class.
- Three tardies will equal one absence.
- All scholars are expected to be respectful to all individuals in the classroom at all times.
- There is to be no gum in the classroom.
- Scholars are to come to class prepared with all materials, including notebook paper, pens, and assignments.
- Any scholar absent from class has the same number of days as they are absent, plus one day to turn in missed assignments. The scholar must find out what assignments were missed (check Google Classroom or ask the teacher as soon as possible). Failure to turn in missed work will result in a zero. Any assignment or project due on the day of absence must be turned in the following school day in attendance.
- Scholars have one week to meet with their teachers to set a date to make up a test. Scholars have until the quarter ends to take a test missed due to absence. Only tests not made up will receive a grade of zero.
- All assignments must be completed by the day they are due.
- Academic Dishonesty: Plagiarism and cheating will not be allowed in this classroom! Zeros will be given for plagiarism and cheating, parents will be called, and further disciplinary actions may be taken. Plagiarism and cheating include copying another scholar's work.

Academic Meaning of a Grade:

The grades reported to parents and students will be divided into two parts. A traditional "A through F" grade will be given to reflect the percentage assigned to the academic work attempted by the scholar. It DOES NOT reflect the scholar's mastery of the content. In addition, scholars will be given a Mastery-Based Learning grade. The last grade of the year will express how well the scholar has mastered the state-required content.

For example, a scholar may be given an "A" for the traditional grade but a "2" on the Mastery-Based Grading system and would be reported as "A/2." Ideally, these grades will match up as "A/4."

- Grades should accurately reflect individual scholar achievement about course evidence outcomes related to Oklahoma Academic Standards / National Standards for the subject taught.
- A "3" on a task/assessment is considered proficient or meeting grade-level standards, while a "4" is considered advanced or meeting grade-level standards with high excellence.
- Extra credit is not applicable, but an extension or alternative assignments/assessments may be offered to show proficiency or advanced proficiency.
- Scholars are given timely feedback and reteach/relearn/reassessment opportunities are provided to promote proficiency in the standards.

Weighted Category:

Formative: 25%
Summative: 45%
Classwork: 20%
Participation: 10%

Grading Scale:

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

Formative Versus Summative Scores: "Teachers record and track *formative scores* from individual assessments as indicators of students' knowledge or skill at particular moments in time. In comparison, *summative scores* are final scores based on the pattern of students' responses over time. Teachers may base each score on several common assessment forms, such as obtrusive, unobtrusive, and student-generated assessments. However, formative scores are used for tracking progress. In contrast, summative scores express students' mastery of a topic, generally at the end of a unit."

— Robert Marzano

Enrichment/Remediation: Students who struggle on an assessment with one or more standards may be assigned enrichment during the school day and required to attend Saturday morning enrichment. When students have completed enrichment, they are given a reassessment to show their understanding of the standard. The grade on the reassessment will replace the original grade.

Scholar Progress:

- Progress reports for scholars are prepared three times each year, midway through each 9-week grading period *except for the first quarter*. Parents MUST come onsite to pick up and sign for the progress report on the day they are issued. Parents/guardians of scholars making a "D" or "F" grade must meet with teachers then. If a parent/guardian does not attend this important meeting, their scholar will not be allowed back in class until the progress report is picked up and the meeting is attended. The conference will be scheduled according to the teacher's work schedule.
- School dismisses at 3:35 pm. Students not making adequate progress may be required to attend Saturday school and be assigned to Personalized Learning instead of an elective.