

School: Crook County High School

Course Title: Chemistry A & B

Instructor's Name: Jeff Lowenbach

Contact Phone (541) 416-6900 x 3146

Contact times: Before School: 7:30-8:00,
Student Connections: 2:55-3:30
Prep Period: 4th Period

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Semester Full Year Course

Course Description: The purpose of first year chemistry is to allow students to study the mechanisms of matter and chemical reactions. Upon completion of the course, the student should have a clear understanding of the history of chemistry, explored the uses of chemistry in various careers, gained an ability to cope with chemical questions and problems related to personal needs and social issues, and an understanding of laboratory safety. This class will focus on the chemistry content knowledge that is necessary to be successful on the NGSS Science test that all students will take in May. To achieve these goals, a significant part of the class time will be spent in the laboratory.

Learning Standards (Critical Content Standards)

- Gain an understanding of the foundations of chemistry to be use throughout the year.
- Understand energy, its transformations, and interactions with matter. Understand the structure and properties of matter.
- Identify the structures of the atom and the electron configuration.
- Explain how the properties of the elements are related to their atomic structure.
- Describe how atoms combine to produce compounds with new properties through the transfer or sharing of electrons.
- Explain how the properties of the elements can be predicted from their location on the periodic table.
- Understand how the structure and the shape of a molecule or compound influences their physical and chemical properties.
- Write balanced chemical equations and utilize in stoichiometric calculations.
- Describe how the structure and motion of particles in solids, liquids and gases affect their properties.
- Utilize the concept of the mole in chemical calculations.
- Investigate factors that influence chemical reaction rates, such as concentration, temperature, pressure and the presence of a catalyst.
- Determine the mass of a molecular substance and perform calculations involving moles, number of particles, or volume of a gas at standard temperature and pressure.
- Demonstrate an understanding of the qualitative and quantities properties of gasses.

- Demonstrate an understanding of the qualitative and quantitative properties of solutions using molarity, molality, percent by mass, and colligative properties.
- Demonstrate an understanding of the qualitative and quantitative properties of acids and bases.

Materials:

- 2-3 Spiral or Composition Notebooks: These notebooks will become your very own Interactive Notebook and will contain notes, handouts, assignments, and other class materials.
- Text: Pearson Chemistry (optional)
- Scientific Calculator
- Basic Classroom Materials: Pencil, Pen, Hi-ligher, Ruler, etc.

Notification of the Right to Object to the Use of Materials

Any resident of the district may raise objection to instructional materials used in the district's educational program despite the fact that the individuals selecting such materials were duly qualified to make the selection and followed the proper procedure and observed the criteria for selecting such material.

The first step in expressing objection is consultation with the classroom teacher or library staff and providing a brief written complaint. The staff member receiving a complaint regarding instructional materials shall try to resolve the issue informally through the discussion of the original assignment or the opportunity for an alternative assignment.

If not satisfied with the initial explanation or an alternative assignment, the person raising the questions will meet with a building administrator who, if unable to resolve the complaint, will provide a Request for Reconsideration form which will be given to the superintendent for action.

Attendance: This class will follow Crook County High School attendance and tardy policies. **You must be present to be successful in Chemistry A & B.** If you are planning on missing class often (hunting, family vacations, illness) chemistry A & B will be much more difficult.

Participation: Chemistry is a lab-based class. **NO FOOD OR DRINK WILL BE PERMITTED IN THE CLASSROOM.** Bottled Water is the exception. **NO CELL PHONES OR OTHER ELECTRONIC DEVICES ARE TO BE USED DURING CLASS TIME.**

Evaluation (grading)

Grading Procedures: To earn credit this semester, the student must have a minimum class average of 60%. The grade will be calculated based on the proficiency model below:

- **Content Assessments (70% of grade):** Assessments will be given, on a minimum, two times throughout each unit of study. Assessments will include exams, quizzes, and projects that ultimately demonstrate each student's level of proficiency.

- **Lab Assessments (20% of grade):** Lab assessments will be given throughout each unit of study and will include formal lab write-ups and projects to show a student's level of proficiency in a given topic.
- **Interactive Notebook/Classwork/Homework (5% of grade):** Classwork and organization will be assessed using your interactive notebook. All classwork, homework, and notes will be organized in your INB and is intended to increase the level of proficiency and prepare each student for upcoming assessments.
- **Semester Final Exam (5% of grade):** A final exam will be give at the end of each semester. The content on this exam will be a cumulative sample of all topics covered that semester.

Grading Scale:

100%-90% = A
 80%-89% = B
 70%-79% = C
 60%-69% = D
 59% & below = F

Retesting Options: Retakes will be offered for each assessment taken, giving students the chance to show proficiency or mastery of material covered. Students will need to complete an **Assessment Retake Form** PRIOR to retaking any assessments. If the retake form is not turned in, the student will NOT be allowed to retake the assessment until the form is received.

Makeup Policy:

- See the guidelines in the student handbook for information about excused absences. In general, students are allowed one day for each day of excused absence to make-up missed assignments, quizzes or tests.
- It is the student's responsibility to obtain missed notes and assignment upon return from an absence. Student support time is a good time to do this. Mr. Lowenbach will be available on all Gold Days for student support

Extra Credit Policy: Students may be given the opportunity to complete optional enrichment activities or projects throughout the semester. There will be no enrichment opportunities during the last three weeks of the semester.