JOHN F. KENNEDY HIGH SCHOOL
6715 GLORIA DRIVE SACRAMENTO CA 95831
JFK.SCUSD.EDU
916.395.5090
HOME OF THE COUGARS

2020--2021 Chemistry & Earth Systems Syllabus [Distance Learning]

Chemistry & Earth Systems **1 year (10 Credits)**

Course description

Chemistry & Earth Systems is a two-semester course covering inorganic chemistry that incorporates Earth Science, which is designed to meet the needs of students pursuing a science major in a university or college. The course encompasses both organic and inorganic chemistry. These major areas will overlap emphasize and build a sound foundation in chemistry. The laboratory portion will correlate with the instructional units of this course. This course meets the A-G Requirements and is aligned with Next Generation Science Standards

Contact Information

- ***Name: Ms. Henry***
- ***Email: yasmin-henry@scusd.edu***
- ***Remind Account: HenryChem2021 Code: @ae8hgg***

Textbook - Online Availablility for Distance Learning

- ***Experience Chemistry in the Earth System SAVVAS California***
- Student Textbook and Materials will be available online via the student CLEVER account (SCUSD)

Required Materials:

- **Notebook for Chemistry (Notes)**
- **Pencils/Pens**
- **Computer Access**
- **Scientific Calculator (Not a graphing calculator)**

Grading Policy

As of September 2020, I will be using a "straight points" system. Students will earn points through active participation, lab activities, quizzes, and projects. The grading scale is still being decided upon by the School District and will available as soon as possible. I will post information in Google Classroom as it arises.

Course Outline: Next Generation Science Standards [NGSS]

The Three Dimensions: NGSS method combined practices for learning that incorporates performance expectations.

- **The Science and Engineering Practices are what scientists/engineers DO.**
- **The Disciplinary Core Ideas are what scientists/engineers KNOW.**
- **The Crosscutting Concepts are HOW scientists/engineers THINK.**

Crosscutting Concepts: 1. Patterns 2. Cause and effect 3. Scale, proportion and quantity 4. Systems and system models 5. Energy and matter: flow cycles and conservation 6. Structure and function 7. Stability and change of systems

Science and Engineering Practices: 1. Asking questions (for science) and defining problems (for engineering) 2. Developing and using models 3. Planning and carrying out investigations 4. Analyzing and interpreting data 5. Using mathematics and computational thinking 6. Constructing explanations (for science) and designing solutions (for engineering) 7. Engaging in argument from evidence 8. Obtaining, evaluating, and communicating information

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Disciplinary Core Ideas:

1. Combustion, Heat, & Energy
2. Atoms, Elements, & Molecules
3. Understanding Chemical Reactions
4. The Chemistry of Climate Change
5. The Dynamics of Chemical Reaction & Ocean Acidification

Unit Structure and Order of Instruction

- Measurements and Calculations
- Lab Safety & Equipment
- Matter
- Chemical Foundations
- Elements Atoms and Ions
- Nomenclature
- Chemical Reactions
- Reactions in Aqueous Solutions
- Gases, Liquids and Solids
- Solutions
- Acids and Bases
- Equilibrium
- Oxidation Reduction Reactions and Electrochemistry
- Chemical Composition
- Chemical Quantities
- Energy
- Modern Atomic Theory
- Chemical Bonding
- Radioactivity and Nuclear Energy

Academic Expectations: Geared for Distance Learning

- Create a space and dedicated time for learning
- Break up the day to be their productive best
- Seek help when needed (teachers, guidance, principals)
- Create balance by taking opportunities to work offline and upload tasks
- Sign into the classrooms daily- keep connected
- Use Google Calendar to organize classes
- Demonstrate learning with completion of assignments
- Engage with the classroom and use tools (like headphones) to focus on instructional videos
- Communicate with your teacher and examine feedback
- Follow the SCUSD Code of Conduct
- Demonstrate online learning etiquette
- Reach out to your teachers and counselors if you are overwhelmed
- Collaborate with peers using respectful language and behaviors
- Wear attire acceptable for online learning
- Support each other in this new way of learning
- Be patient with yourselves and your teachers- we are all learning together!

WELCOME TO CHEMISTRY!

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