

James Clemens High School

11306 County Line Road
Madison, AL 35756



Phone: 256-216-5313

Extension: 95103

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Course Syllabus

CHEMISTRY I - FALL/2021

Instructor: Mrs. Kristen Steele

Dear Parent/Guardian,

I feel fortunate to have your son/daughter in my class this semester. Chemistry is my favorite subject! It is an engaging, hands-on course that will challenge your students to learn using modeling, computation, and lab instrumentation. By the end of the course, I know your child will have a greater sense of understanding of the topic and confidence they could succeed in further sciences in high school and beyond. With your son/daughter, please read the policies in this document, then fill out and sign the first page of the syllabus. **YOUR CHILD WILL THEN TAKE A PICTURE AND UPLOAD A COPY OF THE SIGNED SYLLABUS AS AN ASSIGNMENT on SCHOOLGY by Friday, August 6, 2021. I hope that you will contact me should you have any concerns about the progress of your son/daughter or any aspect of the instruction. I look forward to having a great year!**

Thank you,

Kristen F. Steele

My child and I have read and discussed the classroom syllabus.

Student Name (Print) _____ Date _____

Student Signature _____ Date _____

Parent/Guardian Name (Print) _____ Date _____

Parent/Guardian Signature _____ Date _____

Email Address(es) _____

Phone number(s) _____

Cell

Home

Work

Please check this box if your student needs financial assistance purchasing the required school supplies.

Note: Is there any additional information about your student that might be helpful to know as I strive to serve them well as a teacher this semester? Feel free to share below or send me an email. (I really will read what you say and try to apply it as best I can.) _____



Course Syllabus
CHEMISTRY - FALL/2021
Instructor: Mrs. Kristen Steele

Course Description:

This course introduces the fundamental concepts of general chemistry and provides a study of the structural composition and behavior of matter. Focus areas include: scientific measurement and analysis, atomic structure, chemical nomenclature, balancing equations, stoichiometry, gas laws, solutions, and acids and bases. While focusing on these areas, students will also learn basic laboratory skills and how to perform experiments to confirm course concepts. Students should have a strong background in mathematics, as students will learn and utilize mathematical reasoning skills to perform calculations involving chemicals and their reactions. In addition, students should be proficient in solving algebraic equations, graphing, and using mathematical principles in real-world applications.

18 weeks/1 credit

Prerequisite: Algebra I or Geometry with Data Analysis

Corequisite: Algebra I with Probability

Course Objectives:

Students will:

- Differentiate among pure substances, mixtures, elements, and compounds.
- Describe the structure of carbon chains, branched chains, and rings.
- Use the periodic table to identify periodic trends, including atomic radii, ionization energy, electronegativity, and energy levels.
- Describe solubility in terms of energy changes associated with the solution process.
- Use the kinetic theory to explain states of matter, phase changes, solubility, and chemical reactions.
- Solve stoichiometric problems involving relationships among number of particles, moles, and masses of reactants and products in a chemical reaction.
- Explain the behavior of ideal gases in terms of pressure, volume, temperature, and number of particles.
- Distinguish among endothermic and exothermic physical and chemical changes.
- Distinguish between chemical and nuclear reactions.

Classroom Rules and Expectations:

General Expectations:

1. BE ON TIME. Tardy means that you are not in the room and getting seated when the bell rings. *JCHS policy governs the consequences for tardiness.*
2. BE RESPECTFUL: Practice courtesy and mutual respect. Treat others as you would like to be treated. The classroom and laboratory is to be regarded as a safe and supportive learning environment.
3. BE PREPARED: Mentally focused on reaching your goals and following class expectations; and physically bringing proper materials EVERY DAY.
4. BE RESOURCEFUL: Thoroughly review assignments, videos, textbooks, and notes to answer questions before asking me.

Accommodations: Requests for accommodations for this course or any school event are welcomed from students and parents.

Concerning Laptop Utilization: Student laptops should not be hard-wired to the network or have print capabilities. 2. Use of discs, flash drives, jump drives, or other USB devices will not be allowed on Madison City computers. 3. Neither the teacher, nor the school is responsible for broken, stolen, or lost laptops. 4. Laptops and other electronic devices will be used at the individual discretion of the teacher.

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Grading Policy:

Test grades will account for 70% of the 9-weeks grade, with the remaining 30% being determined by quiz/daily grades. The grading scale is as follows: A (90-100%), B (80-89), C (70-79), D (65-69), and F (below 65). Grades will be a reflection of mastery of the standards. Make sure all absences are excused as class work can be made up and graded for excused absences only. The final exam counts for 20% of the final grade.

Missed Assignments: If you are present in class but do not turn in an assignment by the due date, I will put a 0 in the gradebook. You are allowed to turn in assignments late; however, 30% of the grade will be deducted for being late. **Excused** absences will be granted 3 days to complete and turn in any missed assignments. After 3 days, the assignment will be counted as late unless extenuating circumstances are discussed with me. Assignments missed due to an **unexcused** absence will be given a 0 in accordance to Madison City Schools policy. Please make sure to turn in an excuse for every absence within 3 days!

Make-Up Work Policy:

Make-up tests are only allowed for excused absences. Make-up test time is once per week on a day determined by the instructor. Please, make arrangements with Mrs. Steele to make up a test. Make-up work for daily assignments can be located on Schoology.

Course Materials:

- 1" 3 ring binder (for class notes)
- 200 sheets of loose-leaf college ruled paper
- 3-prong folder with pockets (for holding lab reports)
- Black or blue ink pens
- Highlighter
- Pencil
- Scientific calculator or graphing calculator
- Laptop, Chromebook or other smart digital device. Several assignments require the use of Schoology and EdPuzzle which are accessed in class using a device. Please let me know if you do not have any type of device to bring to school.
- (Optional) Nitrile lab gloves in a sandwich bag with your name written on them (NO LATEX)
- (Optional) Loose-leaf graph-ruled paper for lab work

Texts/Required Readings:

Text: World of Chemistry, CENGAGE Learning, Zumdahl and DeCoste, 2013



Course Syllabus
CHEMISTRY - FALL/2021
Instructor: Mrs. Kristen Steele

18 - WEEK PLAN*

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WEEK 1	Lab Safety and States of Matter
WEEK 2	Precision, Accuracy, and Confidence in Measurement
WEEK 3	Relating Mass and Volume
WEEK 4	Heat Transfer and Temperature
WEEK 5	Heating Curves and Phase Diagrams
WEEK 6	Gas Laws
WEEK 7	Atoms and Molecular Structure
WEEK 8	Intermolecular Forces
WEEK 9	Isotopes and Electron Configuration
WEEK 10	Periodic Trends and Bonding
WEEK 11	Empirical and Molecular Formulas
WEEK 12	Stoichiometry and Chemical Quantities
WEEK 13	Chemical Quantities
WEEK 14	Molarity and Solutions
WEEK 15	Types of Chemical Reactions and Titrations
WEEK 16	Endothermic and Exothermic Reactions
WEEK 17	Equilibrium Reactions
WEEK 18	Review

* This syllabus serves as a guide for both the teacher and student; however, during the term it may become necessary to make additions, deletions or substitutions.