

# CHEMISTRY I

## Syllabus

James Clemens High School  
11306 County Line Road  
Madison, AL 35756



Teacher: Mrs. Emily L. Harris  
Email: [elharris@madisoncity.k12.al.us](mailto:elharris@madisoncity.k12.al.us)  
Phone: 256-216-5313 ext 95067.

### I. Course Description:

This course focuses on the composition, structure, and behavior of matter. Due to the emphasis on advanced problem-solving, incorporating algebraic skills, and a variety of laboratory activities, **it is highly recommended that the students have earned a "B" or higher average in Algebra 1.** This course meets the physical science graduation requirement.

### II. 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.

### III. Classroom 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. Please discuss this with the teacher on an individual basis.

#### Laptop and electronic device utilization:

1. This class will make use of scientific technology, most of which will be provided in the classroom.
2. Cell phones are not required for 95% of the activities in this class. Students will be required to keep their cell phones put away in a backpack when not in use.
3. Laptops and other electronic devices will be used at the individual discretion of the teacher.
4. Neither the teacher nor the school is responsible for broken, stolen, or lost laptops.

# CHEMISTRY I

## Syllabus

James Clemens High School  
11306 County Line Road  
Madison, AL 35756



Teacher: Mrs. Emily L. Harris  
Email: [elharris@madisoncity.k12.al.us](mailto:elharris@madisoncity.k12.al.us)  
Phone: 256-216-5313 ext 95067.

- IV. Grading Policy:** Test grades will account for 70% of the 9-weeks grade (Unit Tests, Formal Lab Reports, Projects), with the remaining 30% being determined by daily assignments (Quizzes, Lab Summaries, Classwork, Homework).
- 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 1/5 of the final grade.
- V. Make-up Test Policy:** Make-up tests are only allowed for excused absences. Students should meet with the teacher upon their return to discuss a make-up time/date. Students are responsible for completing and submitting missed assignments due to an excused absence in accordance with JCHS policy.
- VI. Text and Other Required Reading:** Text: World of Chemistry, CENGAGE Learning, Zumdahl and DeCoste, 2013
- VII. Materials and Supplies Needed:**
- 3-RING BINDER (at least 1") dedicated for this class only
  - loose-leaf, college-ruled paper
  - pencils
  - black or blue pen
  - at least one highlighter
  - SCIENTIFIC CALCULATOR – extremely important! (a graphing calculator may also be used if a student already has one)
  - Roll of paper towels (for lab)
  - Nitrile (non-latex) gloves (optional, but very much appreciated!!)
  - Box of Kleenex (optional, but very much appreciated!! 😊)

# CHEMISTRY I

## Syllabus

James Clemens High School  
11306 County Line Road  
Madison, AL 35756



Teacher:  
Email:

Mrs. Emily L. Harris  
[elharris@madisoncity.k12.al.us](mailto:elharris@madisoncity.k12.al.us)

Phone:

256-216-5313 ext 95067.



## 18 WEEK PLAN: CHEMISTRY I

<b>Week 1</b>	Safety, Classification and Investigation of Matter, Scientific Method and Measurement
<b>Week 2</b>	Safety, Classification and Investigation of Matter, Scientific Method and Measurement
<b>Week 3</b>	Classification and Investigation of Matter, Scientific Method and Measurement
<b>Week 4</b>	Atomic History and Structure
<b>Week 5</b>	Nature of Electrons and Trends on the Periodic Table
<b>Week 6</b>	Nature of Electrons and Trends on the Periodic Table
<b>Week 7</b>	Chemical Bonding
<b>Week 8</b>	Chemical Formulas and Compounds
<b>Week 9</b>	Chemical Formulas and Compounds
<b>Week 10</b>	Chemical Reactions and Equations
<b>Week 11</b>	Chemical Reactions and Equations
<b>Week 12</b>	Stoichiometry
<b>Week 13</b>	Stoichiometry, KMT, and Gases
<b>Week 14</b>	Gases
<b>Week 15</b>	Solutions
<b>Week 16</b>	Acids and Bases
<b>Week 17</b>	Thermodynamics/Rates of Reaction
<b>Week 18</b>	Equilibria

The 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. Adequate notice will be provided to students of any necessary changes.