**Chemistry Course Syllabus |** 2023-2024

**Teacher Name:** Stephanie McDonald

**Room Number:** 4305

**RISE:** Thursday mornings @ 7:45am or Thursday afternoons @ 3:30pm

**Email:** mcdonalds@fultonschools.org

**Website:** [**https://mcdonaldahs.weebly.com**](https://mcdonaldahs.weebly.com/)

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**Textbook**

Houghton Mifflin Harcourt *Modern Chemistry*.

**Course Description**

The Chemistry curriculum continues students’ investigations of the physical sciences that began in Grades K-8 (see Fulton County System-wide Science Vertical Instructional Framework). The course is designed to provide students with the necessary knowledge and skills in chemistry. Chemistry extends the physical sciences to more abstract concepts including, the structure and properties of matter, structure of atoms, the interaction of matter, and the conservation of matter. These concepts are investigated through laboratory experiences and fieldwork designed for students to develop appropriate knowledge and skills in science as inquiry.

**Outcome Expectations**

At the end of this course students should be able to:

1. Use appropriate scientific tools to observe, record, organize, analyze, interpret, write, and present the results of scientific investigations clearly and accurately.
2. Use information, calculations, and predictions to explain the nature, properties, classification, and nomenclature of matter including the prediction of chemical formulas based on balance of charges.
3. Use the law of conservation of matter, including molarity and molality, to determine chemical composition under different reaction types and conditions.
4. Use modern atomic theory to explain the characteristic properties of atoms including size, charge, particles, isotopes, chemical bonds, light emission, and electron movement.
5. Explain the trends in the Periodic table and use the knowledge to predict the properties of representative elements.
6. Demonstrate the effects of varying factors (concentration, temperature, and pressure) on the rate of chemical reaction.
7. Collect, analyze, and compare data on the effects of motion of atoms and molecules on physical and chemical processes and relate these to energy flow during phase change.
8. Explain the process involved in solute-solvent interactions and evaluate the nature of acids compared with bases.

**Course Outline**

**SEMESTER 1**

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| --- | --- | --- |
| **Unit** | **GSE Standard\*** | **Tentative Schedule** |
| 1 – Matter, Measurements, Calculations | SC 2 | 3 Weeks |
| 2 – Atomic Theory, Electron Configuration, Periodic Table, Periodic Trends | SC 1 | 8 Weeks |
| 3 – Chemical Reactions and Stoichiometry | SC 3 | 5 Weeks |

**SEMESTER 2**

|  |  |  |
| --- | --- | --- |
| **Unit** | **GSE Standard\*** | **Tentative Schedule** |
| 4 – Gases, Liquids and Solids | SC 5 | 5 Weeks |
| 5 – Water Systems, Solutions, Acids & Bases | SC 6 | 6 Weeks |
| 6 – Thermochemistry, Kinetics and Equilibrium | SC 4 | 5 Weeks |
| \* For more detailed descriptions of the GSE, please refer to the FCS Website or the Georgia DOE website. |

**Materials**

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| --- | --- | --- |
| * Scientific Calculator (non-graphing, required!)
* Composition Notebook
 | * Glue
* Scissors
 | * Pencils
* Pens
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| --- | --- |
| Grading Categories |  |
| *Semester 1* | *Semester 2* |
| **Major Grades (~6 per semester)** | **55%** | **55%** |
| Tests (TEST): One or more major tests may be given for each unit. Tests include information from class notes, text, lab activities, handouts and demonstrations that were completed during that unit or previous units. You are expected to take a test even if you are absent the day before the test. |  |  |
| **Minor Grades (~13 per semester)** | **35%** | **35%** |
| Laboratory Quizzes: Each unit will have a laboratory quiz covering material from student labs and teacher demonstrations.  |  |  |
| Quizzes: Quizzes may be given during each unit of study. You are expected to take a quiz even if you are absent the day before the quiz. Gradable Experience: The students will complete an assignment at the end of the year integrating information learned throughout the school year. |  |  |
| **Practice (~6 per semester)** | **10%** | **10%** |
| Classwork: Classwork will be assigned daily to facilitate practice of necessary skills. These assignments will be organized in an interactive notebook before the unit test. Completing classwork is a must for doing well on quizzes and tests. |  |  |
| TOTAL | 100% | 100% |

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**Expected Classroom Behaviors and Procedures**

*(NOTE: The teacher reserves the right to make any changes to the rules where appropriate.)*

**Tardies:** It is imperative that all students be seated and ready to begin class when the bell rings for class to begin. Students who are not in the classroom when the bell rings will be counted as tardy.

**Cell Phone Policy:** Unless otherwise indicated, this classroom is 1972…cell phones were not invented yet. When you come into class put your phone on silent and put it away. During quiz/test days, you may be asked to place your phone and/or bags in the front of the classroom until the end of that class period. One warning will be issued to a student who does not follow this guideline, after that one warning, your cell phone will be confiscated by administration and your parents will have to pick it up from them. If an emergency situation occurs and you need to use your phone, communicate that to me.

**Respect**: Make sure to treat your fellow classmates the way that you would want to be treated, we can disagree just do it respectfully.

**Makeup Work:** Students should make every effort to complete any missing work in a timely manner. Students must complete any assignments due before the next major is given OR within 10 days after the grade is posted in Infinite campus. If the student fails to meet this requirement, an “M” will be **permanently** entered in the gradebook. It is the student’s and/or parent’s/guardian’s responsibility to contact the teacher about any missing work.

**Late Work:** Students should make every effort to complete any late work in a timely manner. Assignments passed in 1 day after the due date will receive a 20% deduction. In addition, if that work is not turned in 10 days after the due date it will not be accepted, and an “M” will be **permanently** entered into the gradebook.

**RISE/Recovery:** All students will have an opportunity to redo/retake any major assessment if the student received a grade of 75% and below. Students are eligible to earn a replacement grade on a redo/retake no higher than 75%.  Student redo/retakes must be completed before the next major assignment/assessment or 10 days after the grade is posted in infinite campus. Student must initiate the recovery attempt using an electronic form. The link to the form will be posted on Microsoft Teams and my website.

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Please refer to the school-side syllabus (found on my website) for policies regarding lost/damaged books, RISE/recovery, makeup work, dress code, technology/code of ethics, honor code, plagiarism, and home access center.