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**Physical Science**

***Mission: To offer inspiration through advanced instruction and authentic experiences.***

**Instructor: Ms.VeenaMadhuri** Nadella, Ed.B, M.SC.

Email me at veenamadhuri.nadella@henry.k12.ga.us. Please allow 24 hours for a response. Conferences can be scheduled via the counselors between 7:45 and 8:15 am.

**Physical Science**

Physical Science is a course that teaches students how to apply basic concepts and principles in order to better understand the environment. Students will investigate an atom and Law of Conservation energy. Hands-on laboratory exercises incorporating Atomic Structure, Periodic Table, Chemical Bonding, Waves, Forces and motion, Electricity and Magnetism will be provided to assist students in their understanding of Physical Science themes

**Course Objectives**

AAS associates will

Obtain, evaluate, and communicate information from the Periodic Table to explain the relative properties of elements based on patterns of atomic structure.

Obtain, evaluate, and communicate information to explain how atoms bond to form stable compounds.

Obtain, evaluate, and communicate information to support the Law of Conservation of Matter.

Obtain, evaluate, and communicate information to explain the changes in nuclear structure as a result of fission, fusion and radioactive decay.

Obtain, evaluate, and communicate information to compare and contrast the phases of matter as they relate to atomic and molecular motion.

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| **Required Supplies** |
| * Fully charged Chromebook
* Chromebook charger
* 3-ring binder
* Writing utensil
* Whiteboard Markers
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| **Expectations for Academic Success** |
| * Attend class daily.
* Be prepared for class.
* Respect yourself and others.
* Ask questions.
* Contribute new ideas.
* Work hard and give your best effort.
* No phones, Ear pods, or Smart watches
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**Grade Calculation**

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| --- | --- |
| **Summative Assessments = 60%** | **Formative Assessments = 40%** |
| * Unit-Test in Illuminate
 | * Practice Work: classwork, homework, quizzes, labs, employability skills
* Authentic learning projects, exams, presentations, essays, labs
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| **Culminating Final Exam/Project** |
| All courses will have a culminating exam or project that assesses associate learning of the semester’s course content. This exam/project will be 20% of the overall course grade. |

**Make-up Work/ Late Work Policy**

Associates who are absent are required to contact the instructor for make-up work. The associate will have the same number of days that they are absent to complete the make-up work. Missing work can be submitted (with a 10% deduction) prior to the end of the unit. **Once a unit is over, no more work from that unit will be accepted.** After the unit assessment, any missing assignments will be replaced with the unit assessment grade.

**Extra Credit: No end-of-the unit or end-of-the semester extra credit is available or offered in this class.**

**Employability/Soft Skills**

School Wide Activities:

* Follow school dress code.
* Be Punctuality.
* Professionalism and Policy.

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| Unit | **Course Content and Sequence: Topic** |  **Weeks** |
| 1 | Motion and Force | 2.5 |
| 2 | Energy | 2 |
| 3 | Properties of waves | 2.5 |
| 3 | Electricity and Magnetism | 2 |
| 4 | Matter  | 3 |
| 5 | Chemical Reaction’s  | 3 |
|  | Nuclear Chemistry | 1.5 |

**Grade Calculation**

|  |  |
| --- | --- |
| **Summative Assessments = 40%** | **Formative Assessments = 40%** |
| * Unit Exams
 | * Practice Work: classwork, CFA, homework, quizzes, labs, authentic learning experience.
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| **Final Exam (EOC) = 20%** |
| Final Exam in Semester-1 scheduled in between December- 12th to 16th-2024Final Exam in Semester-2 scheduled in between May – 15 to 18th - 2025 |

 **By signing below, I agree to abide by the learning contact**.

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| Student Signature |  |
| Parent Signature |  |
| Parent’s working phone number (Please) |  |
| Parent’s Current email ID (be legible |  |