

PLANNED COURSE STATEMENT

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| Course Title: 8th Science | Grade Level: 8 |
| Length of Course: 2 Semesters | Credit Area or Type: Core (GPA) |

Prerequisite:

Adopted/Supplemental Materials: STEM Scopes

Course Description:

Students will learn a variety of integrated science topics. Students will continue to learn and practice Scientific Inquiry. Scopes include: Newton's Third Law of Motion, Changes in Force and Motion, Gravitational Forces, Kinetic Energy, Potential Energy, Earth, Sun, and Moon System, Formation and Motion of Galaxies, The Solar System, Electric and Magnetic Forces, Gravitational Forces, Geologic History of Earth, Fossil Record, Embryonic Similarities, Evolutionary History and Relationships, Natural Selection, Gene and Proteins, Mutations, Artificial Selection, Human Impact on the Environment, Introduction to Properties of Waves, Modeling Waves Through Various Mediums, Properties of Visible Light, Modeling Light Waves, Digital vs Analog Signals, Earth, Sun, and Moon System, Natural Selection, and Artificial Selection

Course Goals:

Students will:

1. Understand how objects move and collide.
2. Understand how noncontact forces influence phenomena.
3. Understand how evolution explains life's unity and diversity.
4. Understanding how local and global biodiversity is sustained.
5. Formulate and express scientific questions and hypotheses to be investigated.
6. Design scientific investigations to address and explain questions and hypotheses.
7. Conduct procedures to collect, organize, and display scientific data.
8. Analyze scientific information to develop and present conclusions.

Assessment Strategies:

Oral responses, tests, quizzes, group and/or individual projects, journal writing, lab write-ups, effort, and successful completion of science fair /science inquiry projects.

Accommodations and Modifications:

Instruction will be adjusted according to student's assessed rate and level of learning. To meet learning needs of individual students, modifications to instruction and assignment expectations will be made. Opportunities to both remediate and extend learning will be offered to all students.

Career Related Learning Standards:

Students will demonstrate appropriate workplace behaviors, apply decision-making and problem-solving techniques in workplace situations, demonstrate effective teamwork, apply the principles of effective communication to give and receive information, acquire, use and transfer information, and demonstrate academic knowledge and technical skills required for successful employment within an endorsement area.