**Explore Physical Science Beyond the Basics Syllabus- Franklin County High School

Course Title**: Explore Physical Science Beyond the Basics

**Course Description**: The Explore Physical Science curriculum is a half-year Physical Science course for high school students with limited reading abilities, including those with intellectual disabilities or autism.

**Teacher Introduction**: Kari Myers
Major–National University – Special Education
Masters- National University- Special Education

**Course Requirements**

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| Matter and Its Interactions (PS1) |
| AAD.PHY.PS1.1 | Recognize that all matter is composed of atoms and that atoms are all composed of a nucleus made of protons and neutrons, and surrounded by electrons. |
| AAD.PHY.PS1.2 | Use a periodic table to find common elements and describe the characteristics of the element (e.g. metal, nonmetal, noble gas). |
| AAD.PHY.PS1.3 | Recognize that atoms are conserved during a chemical reaction and model common molecules (e.g. water, salt, O2). |
| AAD.PHY.PS1.4 | Create a model of the nucleus of an atom demonstrating fusion and fission. |
| Motion and Stability: Forces and Interactions (PS2) |
| AAD.PHY.PS2.1 | Create and conduct experiments exploring the relationship between force, mass, and acceleration. (F=ma) |
| AAD.PHY.PS2.2 | Recognize that a magnet has both a positive and negative attraction force field that permeate space and can transfer energy to other objects. |
| AAD.PHY.PS2.3 | Plan and conduct an experiment to provide evidence that systems can change in a predictable using the principals of force and motion, push and pull. (Ee.g. Plan an experiment to provide evidence that an object requires more energy to pull across a flat surface than down a slope). |
| Energy (PS3) |
| AAD.PHY.PS3.1 | Identify and give examples of kinetic, mechanical, chemical, electrical, and thermal energy. |
| AAD.PHY.PS3.2 | Plan and conduct experiments to model the conservation of energy (energy can neither be created nor destroyed) through the demonstration of energy transfer. |
| AAD.PHY.PS3.3 | Recognize that while energy cannot be destroyed, it can converted to less useful forms. |
| AAD.PHY.PS3.4 | Recognize that solar power in is the capture and storing of the sun’s energy through photosynthesis. |
| Waves and Their Application in Technologies for Information Transfer (PS4) |
| AAD.PHY.PS4.1 | Plan and conduct and experiment related to light or sound waves being amplified or using different frequencies and recording the changes to the light or sound as a result. |
| AAD.PHY.PS4.2 | Recognize that waves can pass through matter unchanged and can be used to create visuals not otherwise visible (x-ray technology). |
| AAD.PHY.PS4.3 | Identify modern technology that uses waves (e.g. cell phones, wifi, microwaves, medical imaging). |

**Assessment Types:**  May include the following: quizzes, lab process, journals, and projects.

**Class rules:**
1. Please be considerate of the other students in class.
2. Be prepared to work the entire class period.

**Consequences for failure to follow class rules and/or requirements:**
1. Conference with teacher.
2. Parents will be called if unacceptable behavior continues and may be asked to come to the
school to discuss problems in class.
3. Students with a pattern of disruptive behavior and/or failure to complete homework and
class assignments may be asked to report to the Assistant Principal for counseling and/or punishment.

**Grading system:** Points shall be awarded for cooperative leaning (group work), quizzes, and participation.

**Materials:**  Chrome book, composition notebook, pencil or ink pen, notebook paper

**Contact Information:** FCHS phone 967-2821; e-mail: Kari.myers@fcstn.net