

SPANISH FORT MIDDLE SCHOOL

Course Syllabus

SUBJECT: *Science 8*

YEAR: *2010 – 2011*

TEACHER: *Timothy S. Daniels*
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PLANNING PERIOD: *4th Period*

COURSE DESCRIPTION:

The eighth-grade Physical Science course is designed to promote scientific literacy in accordance with the goals set forth in the *National Science Education Standards* and the *Alabama Course of Study: Science*. Scientific literacy enables students to use scientific principles and processes in everyday life to make informed decisions. A solid foundation in science helps develop and strengthen many skills that students use daily such as solving problems creatively, thinking critically, working cooperatively in teams, practicing stewardship of natural resources, and using technology effectively. Instruction is focused on providing experiences, knowledge, and skills that allow students to build understanding of both the content of science and the nature of the scientific enterprise.

Content standards in Grade 8 are inquiry-based and include concepts and skills in chemistry and physics that are considered foundational. This focus is designed to prepare students for the physics and chemistry courses that are often taken in high school. The scientific process and application skills are integrated into the teaching of the required science content to allow students to combine reasoning and thinking skills with scientific knowledge. This Physical Science course provides eighth-grade students with a firm foundation for scientific literacy and for the pursuit of subsequent science courses.

SUPPLIES

- Textbook, *Physical Science*
- Daily Planner (To be used in every class – homework assignments will be recorded here – everyday!)
- Binder with 5 divider tabs:
(One binder may be used for all core academic courses.)
 - Course Syllabus / Class Rules*
 - Textbook/Homework Assignments*
 - Worksheets*
 - Notes/Journal*
 - Tests/Quizzes*
- One quad rule (graph paper) composition notebook for AMSTI Units.
- Pencil Pouch with pencils, a blue or black ink pen, and notebook paper.
- The textbook must be covered with a cloth book cover.
- Special materials for labs and classroom activities as needed.

PROPOSED UNITS TO BE COVERED THIS YEAR

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|-------------------------------------|-------------------------------|
| ✓ The World of Physical Science | ✓ Matter in Motion |
| ✓ Introduction to Atoms | ✓ Forces and Motion |
| ✓ The Properties of Matter | ✓ Forces in Fluids |
| ✓ The Periodic Table | ✓ Work and Machines |
| ✓ Chemical Bonding | ✓ Energy and Energy Resources |
| ✓ Chemical Reactions | ✓ The Energy of Waves |
| ✓ Elements, Compounds, and Mixtures | ✓ The Nature of Sound |
| ✓ Chemical Compounds | ✓ The Nature of Light |
| ✓ States of Matter | |

*Throughout the course we will be discussing careers and relationships that exist between science and other fields and the connections between science, technology, and society.