Course Title: **Grade 8 Physical Science** **Board Approval Date: July, 2018**
Credit (Secondary):

Grade Level / Course Summary with Big Ideas:

The eighth grade physical science curriculum is based on the SAS curriculum framework, which is aligned to the PA state standards for Science and Technology. As students progress through this course, they will participate in a systematic study of matter and energy within the context of both chemistry and physics. Major skills to be acquired and/or reinforced are laboratory methods and safety, inquiry and design, modeling, observing, hypothesizing, applying mathematical concepts in science, analyzing data for patterns and relationships, interpreting graphics (diagrams, charts, graphs, and images), making predictions, communicating results, defending findings, and using appropriate/available technology effectively. The aforementioned skills will be attained through hands-on activities and group work that emphasize an integrated STEM approach when applicable.

Grade Level Modules (Units):	Suggested Timeline # of Weeks or # of Class Periods/Lessons
1. Laboratory Safety and Equipment	0.5 week
2. Properties and Changes of Matter	1.5 weeks
3. Atomic Theory	1.5 weeks
4. Matter Classification/Periodic Table	2.5 weeks
5. Force and Motion	2 weeks
6. Energy Forms and Conversions	2 weeks
7. Electromagnetism	1.5 weeks
8. Simple Machines	1.5 weeks

Learning Activities/Modes of Formative and Summative Assessment:

Large group instruction	Checklists
Laboratory experiments and reports	Teacher observation
STEM investigations	Projects with Rubrics
Small group work	Science Starters (bell ringers)
Design challenges	Exit Tickets
Computer simulations	IXL online science modules
Tests and quizzes	

Primary Instructional Resources:

Holt Science and Technology Physical Science (Holt, 2005)
Foss, FLINN, and Carolina kits and materials
IXL online science
Science World Magazine
Appropriate Internet resources and apps