

WARREN COUNTY SCHOOL DISTRICT

PLANNED INSTRUCTION

COURSE DESCRIPTION

Course Title: Science 8 Core Elective (May the Force Be With You)
Course Number: 00302
Course Prerequisites: None

Course Description: May the FORCE be with you is a one semester elective designed for eighth grade students. Students will explore wave, light, and electrical energies along with a look at magnets. Exploration of each of these will include careers, everyday life applications and include both activities and laboratories that focus on scientific inquiry.

Suggested Grade Level: Grade 8

Length of Course: One Semester

Units of Credit: .5

PDE Certification and Staffing Policies and Guidelines (CSPG) Required Teacher Certifications:

CSPG 54 Middle Level Science, CSPG 34 Chemistry, CSPG 56 Physics, CSPG 46 General Science

To find the CSPG information, go to [CSPG](#)

Certification verified by the WCSD Human Resources Department: Yes No

WCSD STUDENT DATA SYSTEM INFORMATION

Course Level: Academic

Mark Types: Check all that apply.

F – Final Average MP – Marking Period EXM – Final Exam

GPA Type: GPAEL-GPA Elementary GPAML-GPA for Middle Level NHS-National Honor Society

UGPA-Non-Weighted Grade Point Average GPA-Weighted Grade Point Average

State Course Code: 03011

To find the State Course Code, go to [State Course Code](#), download the Excel file for SCED, click on SCED 6.0 tab, and chose the correct code that corresponds with the course.

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TEXTBOOKS AND SUPPLEMENTAL MATERIALS

Board Approved Textbooks, Software, and Materials:

Title: Physical Science
Publisher: McGraw Hill
ISBN #: 9780076773053
Copyright Date: 2017
WCSD Board Approval Date: 3/12/2018

Supplemental Materials: None

Curriculum Document

WCSD Board Approval:

Date Finalized: 2/14/2018
Date Approved: 3/12/2018
Date(s) Revised: 3/11/2019
Implementation Year: 2018-2019

SPECIAL EDUCATION, 504, and GIFTED REQUIREMENTS

The teacher shall make appropriate modifications to instruction and assessment based on a student's Individual Education Plan (IEP), Chapter 15 Section 504 Plan (504), and/or Gifted Individual Education Plan (GIEP).

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SCOPE AND SEQUENCE OF CONTENT, CONCEPTS, AND SKILLS

Performance Indicator	PA Core Standard and/or Eligible Content	Month Taught and Assessed for Mastery
Compare and contrast scientific theories.	3.1.8.A9	September January
Identify that both direct and indirect observations are used by scientists to study the natural world and universe.	3.1.8.A9	September January
Identify questions and concepts that guide scientific investigations.	3.1.8.A9	September January
Formulate and revise explanations and models using logic and evidence.	3.1.8.A9	September January
Recognize and analyze alternative explanations and models.	3.1.8.A9	September January
Explain the importance of accuracy and precision in making valid measurements.	3.1.8.A9	October February
Relate energy sources and transfers to heat, electricity and temperature.	3.4.7.B	October February
Identify and explain the principles of force and motion.	3.4.7.C	October February
Read, understand and respond to informational text.	CC.3.5.6-8	October February
Write arguments focused on discipline specific contents.	CC.3.6.6-8	October February
Identify, describe and illustrate properties of waves and their interactions.	3.4.7.C	November March
Recognize how waves produce sound.	3.4.7.C	November March
Describe how sound waves travel through various mediums.	3.4.7.C	November March
Define electromagnetic radiation.	3.4.7.C	November March
Describe and illustrate the electromagnetic spectrum.	3.4.7.C	November March
Differentiate between reflection and refraction in lenses and mirrors.	3.4.7.C	December April
Identify and describe technology used in optics.	3.4.7.C	December April
Describe how wave properties produce color.	3.4.7.C	December May
Map the pathway of currents and circuits during the production of electricity	3.4.7.B	December May
Classify types of magnets.	3.4.7.B	December May

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Performance Indicator	PA Core Standard and/or Eligible Content	Month Taught and Assessed for Mastery
Describe the relationship between magnets and electricity.	3.4.7.B	December May

ASSESSMENTS

PSSA Academic Standards, Assessment Anchors, and Eligible Content: The teacher must be knowledgeable of the PDE Academic Standards, Assessment Anchors, and Eligible Content and incorporate them regularly into planned instruction.

Formative Assessments: The teacher will utilize a variety of assessment methods to conduct in-process evaluations of student learning.

Effective formative assessments for this course include: Exit tickets, projects, labs

Summative Assessments: The teacher will utilize a variety of assessment methods to evaluate student learning at the end of an instructional task, lesson, and/or unit.

Effective summative assessments for this course include: Teacher created tests and quizzes