

WARREN COUNTY SCHOOL DISTRICT

PLANNED INSTRUCTION

COURSE DESCRIPTION

Course Title: Science 3

Course Number: 08333

Course Prerequisites: None

Course Description: Students will organize and use data to describe typical weather conditions expected during a particular season and make claims about the merit of a design solution that reduces the impacts of weather hazards. Students will compare life cycles of organisms and learn about the impact of the environment on the development of traits. Students will use evidence to construct explanations regarding how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. Students will understand the types of organisms that lived long ago and the impact of environmental changes on organisms. Students will determine the effects of forces on the motion of an object and the relationships of electric or magnetic interactions between two objects not in contact with each other. Students will apply their understanding of magnetic interactions to define a simple design problem that can be solved with magnets.

Suggested Grade Level: Grade 3

Length of Course: Two Semesters

Units of Credit: None

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

CSPG 69 or Elementary

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

State Course Code: 03233

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

WARREN COUNTY SCHOOL DISTRICT

PLANNED INSTRUCTION

TEXTBOOKS AND SUPPLEMENTAL MATERIALS

Board Approved Textbooks, Software, and Materials:

Title: Inspire Science
Publisher: McGraw Hill
ISBN #: 978-0-07-678003-7
Copyright Date: 2017
WCSD Board Approval Date: 12/03/2018

Supplemental Materials: STEM Lab activities and science kits

Curriculum Document

WCSD Board Approval:

Date Finalized: 7/19/2022
Date Approved: Click or tap to enter a date.
Implementation Year: 2023-2024

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).

WARREN COUNTY SCHOOL DISTRICT

PLANNED INSTRUCTION

SCOPE AND SEQUENCE OF CONTENT AND CONCEPTS

Marking Period 1

- Life Science: From Molecules to Organisms
- Life Science: Heredity

Marking Period 2

- Physical Science: Motion and Stability

Marking Period 3

- Earth and Space Sciences: Earth's Systems
- Earth and Space Sciences: Earth and Human Activity

Marking Period 4

- Life Science: Ecosystems
- Life Science: Biological Evolution

WARREN COUNTY SCHOOL DISTRICT

PLANNED INSTRUCTION

Standards/Eligible Content and Skills

Performance Indicator	PA Core Standard and/or Eligible Content	Marking Period Taught
Develop models to describe that organisms have unique and diverse life cycles, but all have in common birth, growth, reproduction, and death.	3.1.3.A	MP1
Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.	3.1.3.C	MP1, MP4
Use evidence to support the explanation that traits can be influenced by the environment.	3.1.3.D	MP1,MP4
Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.	3.1.3.F	MP1
Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.	3.1.3.G	MP1
Make and communicate observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.	3.2.3.A	MP2
Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.	3.2.3.B	MP2
Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.	3.2.3.C	MP2
Define a simple design problem that can be solved by applying scientific ideas about magnets.	3.2.3.D	MP2
Predict how certain aspects of their daily lives would be different without given technologies.	3.5.3-5.D	MP2
Judge technologies to determine the best one to use to complete a given task or meet a need.	3.5.3-5.K	MP2
Demonstrate how tools and machines extend human capabilities, such as holding, lifting, carrying, fastening, separating, and computing.	3.5.3-5.L	MP2
Demonstrate essential skills of the engineering design process.	3.5.3-5.M	MP2
Identify why a product or system is not working properly.	3.5.3-5.N	MP2
Describe requirements of designing or making a product or system.	3.5.3-5.O	MP2
Evaluate the strengths and weaknesses of existing design solutions, including their own solutions.	3.5.3-5.P	MP2
Illustrate that there are multiple approaches to design.	3.5.3-5.S	MP2
Apply universal principles and elements of design.	3.5.3-5.T	MP2
Evaluate designs based on criteria, constraints, and standards.	3.5.3-5.U	MP2
Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.	3.3.3.A	MP3

WARREN COUNTY SCHOOL DISTRICT

PLANNED INSTRUCTION

Performance Indicator	PA Core Standard and/or Eligible Content	Marking Period Taught
Obtain and combine information to describe climates in different regions of the world.	3.3.3.B	MP3
Make a claim supported by evidence about the merit of a design solution that reduces the impacts of a weather-related hazard.	3.3.3.C	MP3
Make a claim about the environmental and social impacts of design solutions and civic actions, including their own actions.	3.4.3-5.B	MP3
Critique ways that people depend on and change the environment.	3.4.3-5.F	MP3
Follow directions to complete a technological task.	3.5.3-5.C	MP3
Determine factors that influence changes in a society's technological systems or infrastructure.	3.5.3-5.H	MP3
Design solutions by safely using tools, materials, and skills.	3.5.3-5.I	MP3
Explain how technologies are developed or adapted when individual or societal needs and wants change.	3.5.3-5.J	MP3
Demonstrate essential skills of the engineering design process.	3.5.3-5.M	MP3, MP4
Identify why a product or system is not working properly.	3.5.3-5.N	MP3, MP4
Describe requirements of designing or making a product or system.	3.5.3-5.O	MP3, MP4
Evaluate the strengths and weaknesses of existing design solutions, including their own solutions.	3.5.3-5.P	MP3, MP4
Practice successful design skills.	3.5.3-5.Q	MP3, MP4
Apply tools, techniques, and materials in a safe manner as part of the design process.	3.5.3-5.R	MP3, MP4
Illustrate that there are multiple approaches to design.	3.5.3-5.S	MP3, MP4
Apply universal principles and elements of design.	3.5.3-5.T	MP3, MP4
Evaluate designs based on criteria, constraints, and standards.	3.5.3-5.U	MP3, MP4
Interpret how good design improves the human condition.	3.5.3-5.V	MP3
Describe the properties of different materials.	3.5.3-5.W	MP3
Identify the resources needed to get a technical job done, such as people, materials, capital, tools, machines, knowledge, energy, and time.	3.5.3-5.Y	MP3
Create a new product that improves someone's life.	3.5.3-5.Z	MP3
Explain how solutions to problems are shaped by economic, political, and cultural forces.	3.5.3-5.EE	MP3
Compare how things found in nature differ from things that are human made, noting differences and similarities in how they are produced and used.	3.5.3-5.FF	MP3
Describe the unique relationship between science and technology, and how the natural world can contribute to the human-made world to foster innovation.	3.5.3-5.GG	MP3
Differentiate between the role of scientists, engineers, technologists, and others in creating and maintaining technological systems.	3.5.3-5.HH	MP3
Construct an argument that some animals form groups that help members survive.	3.1.3.B	MP4

WARREN COUNTY SCHOOL DISTRICT		
PLANNED INSTRUCTION		
Performance Indicator	PA Core Standard and/or Eligible Content	Marking Period Taught
Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.	3.1.3.E	MP4
Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.	3.1.3.G	MP4
Make a claim supported by evidence about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.	3.1.3.H	MP4
Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.	3.1.3.F	MP4

ASSESSMENTS

PDE 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: center activities, cooperative learning, activities, games, online activities, oral responses, teacher observations, writing, and worksheets.

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: performance assessments, projects, tests, writing, and quizzes.