WARREN COUNTY SCHOOL DISTRICT

PLANNED INSTRUCTION

COURSE DESCRIPTION

Course Title: Wildlife Ecology
Course Number: 00369
Course Prerequisites: N/A

Course Description: This course introduces the student to wildlife biology, ecology, and management. An emphasis will be placed on the identification and classification of PA wildlife species. The basic principles of wildlife ecology, conservation and issues involving wildlife, and society's impact on wildlife are also discussed. Students will develop skills in making informed decisions and taking constructive actions. Relevant lab activities will be incorporated throughout, utilizing scientific inquiry and appropriate technology. Classroom studies are combined with field exercise.

Suggested Grade Level: Grades 9-12
Length of Course: One Semester
Units of Credit: .5
PDE Certification and Staffing Policies and Guidelines (CSPG) Required Teacher Certifications:
CSPG 32 Biology; CSPG 43 Environmental Education; CSPG 46 General Science 7-12
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: 03003
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.

TEXTBOOKS AND SUPPLEMENTAL MATERIALS

Board Approved Textbooks, Software, and Materials:

Title:	n/a
Publisher:	n/a
ISBN #:	n/a
Copyright Date:	n/a
WCSD Board Approval Date:	n/a

Supplemental Materials: Nature Tracking; PA Game Commission; The Cornell Lab of Ornithology; PA Envirothon; PA Fish and Boat Commission; PA Governor's Invasive Species Council

Curriculum Document

WCSD Board Approval:

Date Finalized:	4/2/2025
Date Approved:	5/5/25
Implementation Year:	2024-2025

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).

SCOPE AND SEQUENCE OF CONTENT AND CONCEPTS

Marking Period 1

- Knowledge of Birds and Mammals
- Understanding Wildlife Ecology

Marking Period 2

- Conservation and Management of Wildlife
- Issues Involving Wildlife and Society

Marking Period 3

- Knowledge of Birds and Mammals
- Understanding Wildlife Ecology

Marking Period 4

- Conservation and Management of Wildlife
- Issues Involving Wildlife and Society

Standards/Eligible Content and Skills

Performance Indicator	PA Core Standard and/or Eligible Content	Marking Period Taught
Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed resulting in a net transfer of energy.	SCI.3.1.9-12.G	MP1, MP3
Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem.	SCI.3.1.9-12.M	MP1, MP2 MP3, MP4
Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	SCI.3.1.9-12.N	MP2, MP4
Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence.	SCI.3.1.9-12.S	MP1, MP3
Construct and explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2(the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment.	SCI.3.1.9-12.T	MP1, MP2 MP3, MP4
Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait.	SCI.3.1.9-12.U	MP1, MP2 MP3, MP4
Construct an explanation based on evidence for how natural selection leas to adaptation of populations.	SCI.3.1.9-12.W	MP1, MP3
Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.	SCI.3.1.9-12.X	MP1, MP3
Evaluate and communicate the effect of integrated pest management practices on indoor and outdoor game management.	SCI.3.4.9-12.F	MP2, MP4
Analyze and evaluate how best resource management practices and environmental laws achieve sustainability of natural resources.	SCI.3.4.9-12.G	MP2, MP4
Describe the levels of ecological organization (i.e., organism, population, community, ecosystem, biome, and biosphere).	SCI.9-12.BIO.B.4.1.1	MP1, MP2 MP3, MP4
Describe how energy flows through an ecosystem (e.g., food chains, food webs, energy pyramids).	SCI.9-12.BIO.B.4.2.1	MP1, MP3
Describe biotic interaction in an ecosystem (e.g., competition, predation, symbiosis).	SCI.9-12.BIO.B.4.2.2	MP1, MP2 MP3, MP4
Describe how ecosystems change in response to natural and human disturbances (e.g., climate changes, introduction of nonnative species, pollution, fires).	SCI.9-12.BIO.B.4.2.4	MP1, MP2 MP3, MP4

Performance Indicator	**PA Core Standard and/or Eligible Content**	**Marking Period Taught**
Describe the effects of limiting factors on population dynamics and potential species extinction.	SCI.9-12.BIO.B.4.2.5	MP1, MP2 MP3, MP4
Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.	LA.CC.3.5.11-12.A	MP1, MP2 MP3, MP4
Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.	LA.CC.3.5.11-12.B	MP1, MP2 MP3, MP4
Follow precisely a complex multistep procedure when carrying out experiments taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.	LA.CC.3.5.11-12.C	MP1, MP3
Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific or technical context relevant to grades 11-12 texts and topics.	LA.CC.3.5.11-12.D	MP1, MP2 MP3, MP4
Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	LA.CC.3.5.11-12.E	MP1, MP3
Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative date, video, multimedia) in order to address a question or solve a problem.	LA.CC.3.5.11-12.G	MP1, MP2 MP3, MP4
Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.	LA.CC.3.5.11-12.H	MP1, MP3
Synthesize information from a range of sources (e.g., texts, experiments, simulations) into coherent understanding or a process, phenomenon, or concept, resolving conflicting information when possible.	LA.CC.3.5.11-12.I	MP1, MP2 MP3, MP4
Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).	LA.CC.3.6.9-12.B.5	MP2, 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: Bell ringers, exit tickets, notice and wonderings, progress checks, quizzes, lab assignments, teacher questioning, class discussions, peer assessments, and model trackers

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: CER responses, chapter tests, culminating tasks, and projects