



WAYNESBORO HIGH SCHOOL

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Curriculum at a Glance

Ecology/Environmental Science – Kristin Craft

<u>Time Frame</u>	<u>Content (Nouns)</u>	<u>Skills (Verbs)</u>
Q1 – 1 week	The Nature of Science The Science of Ecology	Observation Inference Analyze case study Environmental decision-making Testing hypotheses
Q1 – 2 weeks	Land and Water Biomes: *Geographic distribution of biomes *Biodiversity *Ecosystem productivity *Climate factors that shape biomes *Aquatic ecosystems (tie in Trout in the Classroom and the Chesapeake Bay)	Identify Describe Compare/contrast Identify cause and effect Evaluate
Q1 – 2 weeks	Populations: *population growth, carrying capacity, and limiting factors (human and other life) *techniques for counting populations in the wild *Natural selection *Interactions within a population	Graph and analyze data Identify Estimate Extrapolate Describe sequence of events Compare/contrast
Q1 – 3 weeks	Communities/Ecosystems: *Food webs *Symbiotic interactions *Energy, biomass, numbers pyramids *Invasive species *Nutrient cycles (water, carbon, nitrogen) *Succession *Observe/study an ecosystem	Explain Diagram Compare/contrast Calculate Predict Sequence series of events

		Observe/analyze
Q2 – 4 weeks	Water and Air: *abundance/distribution of Earth’s water *water quality *water pollution *water footprint *Composition of the atmosphere *Air quality and pollution (outdoor and indoor) *Global warming	Describe Evaluate Test hypotheses Create a diagram Investigate Assess
Q2 – 2 weeks	Resource Use: *Food/agriculture *Energy *Waste production/management	Analyze Evaluate Compare Describe
Q2 – 3 weeks	Human Impact: *Population growth: timeline, factors that influence human population growth. *Effects of humans on Earth’s ecosystem *”Home of the Future” project – create a modern homestead with the lowest ecological footprint possible; evaluate the cost and feasibility of your creation.	Create Design Analyze Evaluate