NEXT GENERATION SCIENCE STANDARDS & NJSOC CLASSES

MS-ESS2 EARTH'S SYSTEMS

STANDARD #:	DESCRIPTION:	RELEVANT COURSES:
MS-ESS2-4	Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.	Water Ecology

MS-ESS3 EARTH AND HUMAN ACTIVITY

STANDARD #:	DESCRIPTION:	RELEVANT COURSES:
MS-ESS3-3	Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.	Water Ecology Metalsmithing
MS-ESS3-5	Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.	Metalsmithing Pioneer Life Woodworking

MS-LS1 FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES

STANDARD #:	DESCRIPTION:	RELEVANT COURSES:
MS-LS1-4	Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.	Wildlife Ecology Herpetology Fish Ecology
MS-LS1-5	Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.	Wildlife Ecology Herpetology Fish Ecology Web of Life
MS-LS1-6	Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.	Wildlife Ecology Herpetology Web of Life

MS-LS2 ECOSYSTEMS: INTERACTIONS, ENERGY AND DYNAMICS

STANDARD #:	DESCRIPTION:	RELEVANT COURSES:
MS-LS2-1	Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.	Wildlife Ecology Herpetology Web of Life

MS-LS2 ECOSYSTEMS: INTERACTIONS, ENERGY AND DYNAMICS, cont'd

STANDARD #:	DESCRIPTION:	RELEVANT COURSES:
MS-LS2-2	Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.	Wildlife Ecology Herpetology Web of Life
MS-LS2-3	Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.	Wildlife Ecology Herpetology
MS-LS2-4	Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.	Wildlife Ecology Herpetology Web of Life

MS-LS4 BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY

STANDARD #:	DESCRIPTION:	RELEVANT COURSES:
MS-LS4-2	Apply scientific ideas to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer evolutionary relationships.	Herpetology Fish Ecology

MS-PS2 MOTION AND STABILITY: FORCES AND INTERACTIONS

STANDARD #:	DESCRIPTION:	RELEVANT COURSES:
MS-PS2-2	Plan an investigation to provide evidence that the change in an object's motion depends on the sum of forces on the object and the mass of the object.	Boating

MS-PS1 MATTER AND ITS INTERACTIONS

STANDARD #:	DESCRIPTION:	RELEVANT COURSES:
MS-PS1-2	Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.	Metalsmithing Water Ecology