

**Main Criteria:** Hawaii Content and Performance Standards

**Secondary Criteria:** Virtual Field Trips

**Subjects:** Science, Social Studies

**Grade:** 9

**Correlation Options:** Show Correlated

**Hawaii Content and Performance Standards**

**Science**

Grade: 9 - Adopted: 2007

<b>CONTENT STANDARD / COURSE</b>	<b>HI.SC.BS.</b>	<b>BIOLOGICAL SCIENCE</b>
<b>STANDARD / PERFORMANCE INDICATOR / DOMAIN</b>	<b>SC.BS.2.</b>	The Scientific Process: <b>NATURE OF SCIENCE:</b> Understand that science, technology, and society are interrelated
<b>INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK</b>		<b>TOPIC:</b> Science, Technology, and Society
<b>EXPECTATION / TOPIC</b>	<b>SC.BS.2.1.</b>	Explain how scientific advancements and emerging technology have influenced society  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol The Amazon Rainforest - Part 2 - Older Grades
<b>CONTENT STANDARD / COURSE</b>	<b>HI.SC.BS.</b>	<b>BIOLOGICAL SCIENCE</b>
<b>STANDARD / PERFORMANCE INDICATOR / DOMAIN</b>	<b>SC.BS.3.</b>	Life and Environmental Sciences: <b>ORGANISMS AND THE ENVIRONMENT:</b> Understand the unity, diversity, and interrelationships of organisms, including their relationship to cycles of matter and energy in the environment
<b>INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK</b>		<b>TOPIC:</b> Cycles of Matter and Energy
<b>EXPECTATION / TOPIC</b>	<b>SC.BS.3.1.</b>	Describe biogeochemical cycles within ecosystems  <u>Virtual Field Trips</u> La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades
<b>EXPECTATION / TOPIC</b>	<b>SC.BS.3.3.</b>	Explain how matter and energy flow through living systems and the physical environment  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
<b>CONTENT STANDARD / COURSE</b>	<b>HI.SC.BS.</b>	<b>BIOLOGICAL SCIENCE</b>
<b>STANDARD / PERFORMANCE INDICATOR / DOMAIN</b>	<b>SC.BS.3.</b>	Life and Environmental Sciences: <b>ORGANISMS AND THE ENVIRONMENT:</b> Understand the unity, diversity, and interrelationships of organisms, including their relationship to cycles of matter and energy in the environment
<b>INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK</b>		<b>TOPIC:</b> Interdependence
<b>EXPECTATION / TOPIC</b>	<b>SC.BS.3.4.</b>	Explain dynamic equilibrium in organisms, populations, and ecosystems; explain the effect of equilibrium shifts  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol

		La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
<b>CONTENT STANDARD / COURSE</b>	HI.SC.BS.	<b>BIOLOGICAL SCIENCE</b>
<b>STANDARD / PERFORMANCE INDICATOR / DOMAIN</b>	SC.BS.4.	Life and Environmental Sciences: <b>STRUCTURE AND FUNCTION IN ORGANISMS</b> : Understand the structures and functions of living organisms and how organisms can be compared scientifically
<b>INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK</b>		<b>TOPIC</b> : Cells, Tissues, Organs, and Organ Systems
<b>EXPECTATION / TOPIC</b>	SC.BS.4.4.	Describe how homeostatic balance occurs in cells and organisms  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks West - Nevada, California
<b>CONTENT STANDARD / COURSE</b>	HI.SC.BS.	<b>BIOLOGICAL SCIENCE</b>
<b>STANDARD / PERFORMANCE INDICATOR / DOMAIN</b>	SC.BS.4.	Life and Environmental Sciences: <b>STRUCTURE AND FUNCTION IN ORGANISMS</b> : Understand the structures and functions of living organisms and how organisms can be compared scientifically
<b>INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK</b>		<b>TOPIC</b> : Classification
<b>EXPECTATION / TOPIC</b>	SC.BS.4.6.	Explain the organization of life on Earth using the modern classification system  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
<b>CONTENT STANDARD / COURSE</b>	HI.SC.BS.	<b>BIOLOGICAL SCIENCE</b>
<b>STANDARD / PERFORMANCE INDICATOR / DOMAIN</b>	SC.PS.5.	Life and Environmental Sciences: <b>DIVERSITY, GENETICS, AND EVOLUTION</b> : Understand genetics and biological evolution and their impact on the unity and diversity of organisms
<b>INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK</b>		<b>TOPIC</b> : Biological Evolution
<b>EXPECTATION / TOPIC</b>	SC.BS.5.1.	Explain the theory of evolution and describe evidence that supports this theory  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
<b>CONTENT STANDARD / COURSE</b>	HI.SC.ES.	<b>EARTH SPACE SCIENCE</b>
<b>STANDARD / PERFORMANCE INDICATOR / DOMAIN</b>	SC.ES.2.	The Scientific Process: <b>NATURE OF SCIENCE</b> : Understand that science, technology, and society are interrelated
<b>INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK</b>		<b>TOPIC</b> : Science, Technology, and Society
<b>EXPECTATION / TOPIC</b>	SC.ES.2.3.	Explain the impact of humans on the Earth system  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks - West - Alaska & Hawaii
<b>CONTENT STANDARD / COURSE</b>	HI.SC.ES.	<b>EARTH SPACE SCIENCE</b>

STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.ES.8.	Physical, Earth, and Space Sciences: EARTH AND SPACE SCIENCE: Understand the Earth and its processes, the solar system, and the universe and its contents
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Forces that Shape the Earth
EXPECTATION / TOPIC	SC.ES.8.1.	Describe how elements and water move through solid Earth, the oceans, atmosphere, and living things as part of geochemical cycles  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
CONTENT STANDARD / COURSE	HI.SC.ES.	EARTH SPACE SCIENCE
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.ES.8.	Physical, Earth, and Space Sciences: EARTH AND SPACE SCIENCE: Understand the Earth and its processes, the solar system, and the universe and its contents
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Forces that Shape the Earth
EXPECTATION / TOPIC	SC.ES.8.4.	Describe how heat and energy transfer into and out of the atmosphere and their involvement in global climate  <u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii National Parks of the Western Region - Part 1
EXPECTATION / TOPIC	SC.ES.8.5.	Explain the effects of movements of crustal plates  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks West - Nevada, California National Parks West - Wyoming, Utah
EXPECTATION / TOPIC	SC.ES.8.6.	Describe how winds and ocean currents are produced on the Earth's surface  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
EXPECTATION / TOPIC	SC.ES.8.7.	Describe climate and weather patterns associated with certain geographic locations and features  <u>Virtual Field Trips</u> La Selva Amazonica - Pte 1 (En Espagnol) National Parks West - Nevada, California National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades
CONTENT STANDARD / COURSE	HI.SC.PH.	PHYSICS
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.PH.4.	Force and Motion - Understand the relationship between force, mass, and motion of objects
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Motion
EXPECTATION / TOPIC	SC.PH.4.4.	Analyze motion in terms of position, time, velocity and acceleration, both quantitatively and qualitatively  <u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii
CONTENT STANDARD / COURSE	HI.SC.ENV.	ENVIRONMENTAL SCIENCE

STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.ENV.2.	Nature of Science - Understand that science, technology, and society are interrelated
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Science, Technology, and Society
EXPECTATION / TOPIC	SC.ENV.2.1.	Explain how scientific advancements and emerging technology have influenced society  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 2 - Older Grades
CONTENT STANDARD / COURSE	HI.SC.ENV.	ENVIRONMENTAL SCIENCE
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.ENV.3.	Earth Science - Understand the physical systems of the earth.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Forces that shape the earth
EXPECTATION / TOPIC	SC.ENV.3.2.	Compare different erosion processes  <u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1
CONTENT STANDARD / COURSE	HI.SC.ENV.	ENVIRONMENTAL SCIENCE
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.ENV.4.	Life Science - Understand the interconnections of living systems.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Systems and Connections
EXPECTATION / TOPIC	SC.ENV.4.2.	Explain why populations undergo cyclic fluctuations  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
EXPECTATION / TOPIC	SC.ENV.4.3.	Explain how ecosystems respond to human activities  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades
EXPECTATION / TOPIC	SC.ENV.4.4.	Use models to represent the process of succession  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
CONTENT STANDARD / COURSE	HI.SC.ENV.	ENVIRONMENTAL SCIENCE

STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.ENV.4.	Life Science - Understand the interconnections of living systems.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Flow of Matter and Energy
EXPECTATION / TOPIC	SC.ENV.4.5.	Explain the relationship between the carbon cycle and fossil fuels <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
CONTENT STANDARD / COURSE	HI.SC.ENV.	ENVIRONMENTAL SCIENCE
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.ENV.5.	Interdependence of The Environment and Human Societies - Understand the interdependence between environmental systems and human societies.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Human Impact
EXPECTATION / TOPIC	SC.ENV.5.1.	Explain how economic and societal decisions affect global and local ecosystems <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 2 - Older Grades
EXPECTATION / TOPIC	SC.ENV.5.2.	Assess the effect of human actions on an environmental system <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades
EXPECTATION / TOPIC	SC.ENV.5.3.	Explain how population growth and natural resource consumption affect global sustainability <u>Virtual Field Trips</u> Galapagos Islands - Espagnol The Amazon Rainforest - Part 2 - Older Grades
CONTENT STANDARD / COURSE	HI.SC.ENV.	ENVIRONMENTAL SCIENCE
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.ENV.5.	Interdependence of The Environment and Human Societies - Understand the interdependence between environmental systems and human societies.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Resource Use
EXPECTATION / TOPIC	SC.ENV.5.5.	Compare the consumption of natural resources by different nations <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks - West - Alaska & Hawaii National Parks West - Nevada, California The Amazon Rainforest - Part 2 - Older Grades

EXPECTATION / TOPIC	SC.ENV.5.6.	<p>Explain why recycling and conservation of resources are important</p> <p><u>Virtual Field Trips</u>  Galapagos Islands - Espagnol  National Parks - West - Alaska &amp; Hawaii  National Parks West - Nevada, California  National Parks West - Wyoming, Utah  National Parks of the Western Region - Part 1  The Amazon Rainforest - Part 2 - Older Grades</p>
CONTENT STANDARD / COURSE	HI.SC.MS.	MARINE SCIENCE
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.MS.2.	Nature of Science - Understand that science, technology, and society are interrelated
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Science, Technology, and Society
EXPECTATION / TOPIC	SC.MS.2.1.	<p>Explain how scientific advancements and emerging technology have influenced society</p> <p><u>Virtual Field Trips</u>  Galapagos Islands - Espagnol  The Amazon Rainforest - Part 2 - Older Grades</p>
EXPECTATION / TOPIC	SC.MS.2.2.	<p>Compare the risks and benefits of potential solutions to technological issues</p> <p><u>Virtual Field Trips</u>  Galapagos Islands - Espagnol</p>
CONTENT STANDARD / COURSE	HI.SC.MS.	MARINE SCIENCE
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.MS.3.	Oceanography - Understand the physical features of the ocean and its influences on weather and climate.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Physical Characteristics of the Ocean
EXPECTATION / TOPIC	SC.MS.3.3.	<p>Explain how the ocean participates in the geochemical cycling of elements</p> <p><u>Virtual Field Trips</u>  The Amazon Rainforest - Part 2 - Older Grades</p>
CONTENT STANDARD / COURSE	HI.SC.MS.	MARINE SCIENCE
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.MS.3.	Oceanography - Understand the physical features of the ocean and its influences on weather and climate.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Tides, Waves, and Currents
EXPECTATION / TOPIC	SC.MS.3.5.	<p>Describe how waves and currents move using physical principles</p> <p><u>Virtual Field Trips</u>  Galapagos Islands - Espagnol</p>
EXPECTATION / TOPIC	SC.MS.3.6.	<p>Explain how erosion occurs and the effects of sedimentation</p> <p><u>Virtual Field Trips</u>  National Parks - West - Alaska &amp; Hawaii</p>
CONTENT STANDARD / COURSE	HI.SC.MS.	MARINE SCIENCE

STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.MS.3.	Oceanography - Understand the physical features of the ocean and its influences on weather and climate.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Oceans Influence
EXPECTATION / TOPIC	SC.MS.3.7.	Describe the relationship between fresh bodies of water, watersheds, and the ocean  <u>Virtual Field Trips</u> National Parks of the Western Region - Part 1
EXPECTATION / TOPIC	SC.MS.3.9.	Explain how El Nino influences global weather patterns  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
CONTENT STANDARD / COURSE	HI.SC.MS.	MARINE SCIENCE
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.MS.4.	Ecological Systems - Understand the locations and characteristics of marine ecosystems.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Ecosystems
EXPECTATION / TOPIC	SC.MS.4.1.	Differentiate freshwater, brackish, and saltwater ecosystems  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) National Parks - West - Alaska & Hawaii National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades
EXPECTATION / TOPIC	SC.MS.4.2.	Explain how estuaries provide productive and important nursery areas for many marine species  <u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii National Parks of the Western Region - Part 1
CONTENT STANDARD / COURSE	HI.SC.MS.	MARINE SCIENCE
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.MS.4.	Ecological Systems - Understand the locations and characteristics of marine ecosystems.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Influence of Water
EXPECTATION / TOPIC	SC.MS.4.5.	Explain how chemical factors (e.g., pH, salinity, dissolved O <sub>2</sub> , nutrients) affect the distribution of life in the ocean  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks - West - Alaska & Hawaii National Parks of the Western Region - Part 1
EXPECTATION / TOPIC	SC.MS.4.6.	Describe how physical factors (e.g., light, temperature, pressure, current) define the region/zone in the ocean  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks - West - Alaska & Hawaii National Parks of the Western Region - Part 1

CONTENT STANDARD / COURSE	HI.SC.MS.	MARINE SCIENCE
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.MS.5.	Structure, Function, and Interdependence - Understand the structure, function, and interdependence of marine organisms.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Structure And Function
EXPECTATION / TOPIC	SC.MS.5.1.	Explain how adaptations help animals survive in a marine environment  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
EXPECTATION / TOPIC	SC.MS.5.2.	Compare the characteristics of marine organisms (e.g., planktonic, invertebrate, vertebrate)  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks - West - Alaska & Hawaii
CONTENT STANDARD / COURSE	HI.SC.MS.	MARINE SCIENCE
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.MS.5.	Structure, Function, and Interdependence - Understand the structure, function, and interdependence of marine organisms.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Interdependence
EXPECTATION / TOPIC	SC.MS.5.3.	Compare forms of marine symbiosis  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks - West - Alaska & Hawaii
CONTENT STANDARD / COURSE	HI.SC.MS.	MARINE SCIENCE
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.MS.6.	Interdependence of Humans and the Ocean - Understand the interdependence of humans and the ocean.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Human Impact
EXPECTATION / TOPIC	SC.MS.6.4.	Explain how human activities and development lead to marine pollution (e.g., point sources, non-point sources)  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
EXPECTATION / TOPIC	SC.MS.6.5.	Describe how urbanization has impacted the ocean  <u>Virtual Field Trips</u> La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
EXPECTATION / TOPIC	SC.MS.6.6.	Explain how ocean resources are managed  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
CONTENT STANDARD / COURSE	HI.SC.PAH.	PLANTS AND ANIMALS IN HAWAII
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.PAH.2:	Nature of Science--Understand that science, technology, and society are interrelated

INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Science, Technology, and Society
EXPECTATION / TOPIC	SC.PAH.2.2.	<p>Compare the risks and benefits of potential solutions to technological issues</p> <p><u>Virtual Field Trips</u>  Galapagos Islands - Espagnol  National Parks - West - Alaska &amp; Hawaii  National Parks West - Nevada, California  National Parks West - Wyoming, Utah  National Parks of the Western Region - Part 1  The Amazon Rainforest - Part 2 - Older Grades</p>
CONTENT STANDARD / COURSE	HI.SC.PAH.	PLANTS AND ANIMALS IN HAWAII
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.PAH.3.	Organisms and the Environment--Understand the unity, diversity, and interrelationships of organisms, including their relationship to cycles of matter and energy in the environment
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Cycles of Matter and Energy
EXPECTATION / TOPIC	SC.PAH.3.1.	<p>Illustrate biogeochemical cycles within the Hawaiian ecosystem and describe how abiotic and biotic influences have impacted these cycles</p> <p><u>Virtual Field Trips</u>  La Selva Amazonica - Pte 1 (En Espagnol)  The Amazon Rainforest - Part 1 - Older Grades  The Amazon Rainforest - Part 2 - Older Grades</p>
EXPECTATION / TOPIC	SC.PAH.3.3.	<p>Explain how matter and energy flow through living systems and the physical environments (e.g., subalpine, rainforest, montane bogs, dryland and mesic forests, subterranean, freshwater, coastal) found in Hawaii</p> <p><u>Virtual Field Trips</u>  The Amazon Rainforest - Part 2 - Older Grades</p>
CONTENT STANDARD / COURSE	HI.SC.PAH.	PLANTS AND ANIMALS IN HAWAII
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.PAH.3.	Organisms and the Environment--Understand the unity, diversity, and interrelationships of organisms, including their relationship to cycles of matter and energy in the environment
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Interdependence
EXPECTATION / TOPIC	SC.PAH.3.4.	<p>Explain dynamic equilibrium in populations and the shifts in equilibrium due to abiotic (e.g., changes in climate, soil composition) and biotic (e.g., presence of invasive species such as the brown tree snake, two spotted leaf hopper, feral pigs and goats, nonindigenous grasses, miconia) factors on flora and fauna populations found within Hawaii's land and oceanic environments</p> <p><u>Virtual Field Trips</u>  Galapagos Islands - Espagnol</p>
EXPECTATION / TOPIC	SC.PAH.3.5.	<p>Explain dynamic equilibrium in ecosystems and the effects of equilibrium shifts due to changes in abiotic and biotic (e.g., species diversity) factors within Hawaii's land and oceanic environments</p> <p><u>Virtual Field Trips</u>  La Selva Amazonica - Pte 1 (En Espagnol)  The Amazon Rainforest - Part 1 - Older Grades</p>

EXPECTATION / TOPIC	SC.PAH.3.6.	<p>Explain how human actions (e.g., conservation, introduction of nonindigenous species, destruction and fragmentation of native habitat, hunting, over harvesting, poor land use practices, stream diversion) have impacted organisms in Hawaii since the first Polynesians</p> <p><u>Virtual Field Trips</u>  Galapagos Islands - Espagnol  La Selva Amazonica - Pte 1 (En Espagnol)  National Parks - West - Alaska &amp; Hawaii  National Parks West - Nevada, California  National Parks West - Wyoming, Utah  National Parks of the Western Region - Part 1  The Amazon Rainforest - Part 1 - Older Grades  The Amazon Rainforest - Part 2 - Older Grades</p>
CONTENT STANDARD / COURSE	HI.SC.PAH.	PLANTS AND ANIMALS IN HAWAII
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.PAH.4.	Structure and Function in Organisms--Understand the structures and functions of living organisms and how organisms can be compared scientifically
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Cells, Tissues, Organs, and Organ Systems
EXPECTATION / TOPIC	SC.PAH.4.4.	<p>Describe how homeostatic balance occurs in cells and organisms (e.g., salt balance)</p> <p><u>Virtual Field Trips</u>  Galapagos Islands - Espagnol  National Parks West - Nevada, California</p>
CONTENT STANDARD / COURSE	HI.SC.PAH.	PLANTS AND ANIMALS IN HAWAII
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.PAH.4.	Structure and Function in Organisms--Understand the structures and functions of living organisms and how organisms can be compared scientifically
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Classification
EXPECTATION / TOPIC	SC.PAH.4.6.	<p>Classify a variety of Hawaiian organisms using the modern classification system and explain the evidence (e.g., structural similarities, fossil record, genetic relationships) that supports the system's organization</p> <p><u>Virtual Field Trips</u>  Galapagos Islands - Espagnol  La Selva Amazonica - Pte 1 (En Espagnol)  The Amazon Rainforest - Part 1 - Older Grades</p>
CONTENT STANDARD / COURSE	HI.SC.PAH.	PLANTS AND ANIMALS IN HAWAII
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.PAH.5.	Diversity, Genetics, and Evolution--Understand genetics and biological evolution and their impact on the unity and diversity of organisms
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Biological Evolution
EXPECTATION / TOPIC	SC.PAH.5.1.	<p>Explain the theory of evolution and describe evidence that supports this theory</p> <p><u>Virtual Field Trips</u>  Galapagos Islands - Espagnol</p>
EXPECTATION / TOPIC	SC.PAH.5.2.	Explain how the theory of natural selection accounts for the development of a wide diversity of some species and lack of others

		on Hawaii <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
<b>CONTENT STANDARD / COURSE</b>	<b>HI.SC.HP.</b>	<b>HUMAN PHYSIOLOGY</b>
<b>STANDARD / PERFORMANCE INDICATOR / DOMAIN</b>	<b>SC.HP.2.</b>	Nature of Science--Understand that science, technology, and society are interrelated
<b>INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK</b>		TOPIC: Science, Technology, and Society
<b>EXPECTATION / TOPIC</b>	<b>SC.HP.2.1.</b>	Explain how scientific advancements and emerging technology have influenced society  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
<b>CONTENT STANDARD / COURSE</b>	<b>HI.SC.Z.</b>	<b>ZOOLOGY</b>
<b>STANDARD / PERFORMANCE INDICATOR / DOMAIN</b>	<b>SC.Z.3.</b>	Structure and function in Animals--Understand the relationship between the structure and function of an animal's body.
<b>INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK</b>		TOPIC: Patterns of Organization
<b>EXPECTATION / TOPIC</b>	<b>SC.Z.3.2.</b>	Evaluate the different levels of bodily organization (e.g., unicellular, diploblastic, triploblastic) and the body plans associated with each (e.g., acoelomate, pseudocoelomate, coelomate)  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
<b>CONTENT STANDARD / COURSE</b>	<b>HI.SC.Z.</b>	<b>ZOOLOGY</b>
<b>STANDARD / PERFORMANCE INDICATOR / DOMAIN</b>	<b>SC.Z.3.</b>	Structure and function in Animals--Understand the relationship between the structure and function of an animal's body.
<b>INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK</b>		TOPIC: Physiology and Life Cycles
<b>EXPECTATION / TOPIC</b>	<b>SC.Z.3.5.</b>	Trace the life cycles of various groups of animals (e.g., plasmodium, cnidarians, nematodes, insects, tunicates, anurans)  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
<b>EXPECTATION / TOPIC</b>	<b>SC.Z.3.6.</b>	Compare the physiology of the nine major phyla of the animal kingdom  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades
<b>CONTENT STANDARD / COURSE</b>	<b>HI.SC.Z.</b>	<b>ZOOLOGY</b>

STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.Z.4.	Animals and the Environment--Understand the interaction of animals with their environment.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Behavior and Symbiosis
EXPECTATION / TOPIC	SC.Z.4.1.	Explain how animals' behavior (e.g., parental care, division of labor, niche, innate hive behavior in insects) may enhance the species' chances of survival  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) National Parks - West - Alaska & Hawaii National Parks West - Wyoming, Utah The Amazon Rainforest - Part 1 - Older Grades
EXPECTATION / TOPIC	SC.Z.4.2.	Determine how species enhance their rate of survival by using symbiosis (e.g., mutualism, commensalism, parasitism) and mimicry  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
CONTENT STANDARD / COURSE	HI.SC.Z.	ZOOLOGY
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.Z.5.	Genetics and Evolution--Understand the relationship between genetics and evolution.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Genetics
EXPECTATION / TOPIC	SC.Z.5.2.	Describe how evolution depends on variation with individuals, population genetics, and the species gene pool  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
CONTENT STANDARD / COURSE	HI.SC.Z.	ZOOLOGY
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.Z.5.	Genetics and Evolution--Understand the relationship between genetics and evolution.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Evolution
EXPECTATION / TOPIC	SC.Z.5.4.	Explain how the adaptations of the different phyla enhance their survival  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades
CONTENT STANDARD / COURSE	HI.SC.B.	BOTANY

STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.B.3.	Plant Structure and Function--Understand the metabolism, anatomy, and physiology of plants.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Cells, Tissues and Metabolism
EXPECTATION / TOPIC	SC.B.3.2.	Evaluate the function of various plant tissues (e.g., stem, root, leaf) in terms of transport of materials, waste disposal, protein synthesis, energy capture and release, information feedback, movement, and homeostasis  <u>Virtual Field Trips</u> La Selva Amazonica - Pte 1 (En Espagnol) National Parks West - Nevada, California The Amazon Rainforest - Part 1 - Older Grades
CONTENT STANDARD / COURSE	HI.SC.B.	BOTANY
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SC.B.4.	Plants and the Environment-- Understand interactions between plants, the environment, and humans.
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Interaction with the environment
EXPECTATION / TOPIC	SC.B.4.1.	Describe how plant products (e.g., drugs, timber, spices, herbs, fossil fuels, fibers) impact human life  <u>Virtual Field Trips</u> National Parks West - Nevada, California The Amazon Rainforest - Part 2 - Older Grades
EXPECTATION / TOPIC	SC.B.4.2.	Evaluate the effect of biotic and abiotic factors (e.g., succession, competition, human influences) on plant stability within the environment  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades

## Hawaii Content and Performance Standards

### Social Studies

Grade: 9 - Adopted: 2007

CONTENT STANDARD / COURSE	HI.SS.9PD.	PARTICIPATION IN A DEMOCRACY
STANDARD / PERFORMANCE INDICATOR / DOMAIN	SS.9PD.3.	History: PARTICIPATION IN A DEMOCRACY-Understand important historical events and ideas related to the development of civics and political science
INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK		TOPIC: Early Historical Events
EXPECTATION / TOPIC	SS.9PD.3.2.	Describe how historical events and ideas have influenced American constitutional democracy  <u>Virtual Field Trips</u> Washington, DC - Grades 6 - 12

<b>CONTENT STANDARD / COURSE</b>	<b>HI.SS.9PD.</b>	<b>PARTICIPATION IN A DEMOCRACY</b>
<b>STANDARD / PERFORMANCE INDICATOR / DOMAIN</b>	<b>SS.9PD.4.</b>	<b>Political Science/Civics: GOVERNANCE, DEMOCRACY, AND INTERACTION-Understand the purpose and historical impact of political institutions, the principles and values of American constitutional democracy, and the similarities and differences in government across cultural perspectives</b>
<b>INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK</b>		<b>TOPIC: Political Institutions</b>
<b>EXPECTATION / TOPIC</b>	<b>SS.9PD.4.2.</b>	Describe how the American Constitution embodies the principles of rule of law, popular sovereignty, separation of powers, checks and balances, and limited government  <u>Virtual Field Trips</u> Washington, DC - Grades 6 - 12
<b>CONTENT STANDARD / COURSE</b>	<b>HI.SS.9PD.</b>	<b>PARTICIPATION IN A DEMOCRACY</b>
<b>STANDARD / PERFORMANCE INDICATOR / DOMAIN</b>	<b>SS.9PD.8.</b>	<b>Economics: RESOURCES, MARKETS, AND GOVERNMENT-Understand economic concepts and the characteristics of various economic systems</b>
<b>INDICATOR / GRADE LEVEL EXPECTATION / BENCHMARK</b>		<b>TOPIC: Economic Role of Government</b>
<b>EXPECTATION / TOPIC</b>	<b>SS.9PD.8.1.</b>	Describe the economic functions of government, including providing public goods and services, maintaining competition, redistributing income, correcting for externalities, and stabilizing the economy  <u>Virtual Field Trips</u> Barcelona - English Barcelona - Espagnol