

**Main Criteria:** Alabama Courses of Study  
**Secondary Criteria:** Virtual Field Trips  
**Subjects:** Science, Social Studies  
**Grade:** 9  
**Correlation Options:** Show Correlated

**Alabama Courses of Study  
 Science**

Grade: 9 - Adopted: 2015

<b>STRAND / DOMAIN</b>	<b>AL.HS.PS.</b>	<b>PHYSICAL SCIENCE</b>
<b>OBJECTIVE / CATEGORY</b>		<b>Motion and Stability: Forces and Interactions</b>
<b>STANDARD</b>	<b>HS.PS.7.</b>	Analyze and interpret data for one- and two-dimensional motion applying basic concepts of distance, displacement, speed, velocity, and acceleration (e.g., velocity versus time graphs, displacement versus time graphs, acceleration versus time graphs).  <u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii
<b>STRAND / DOMAIN</b>	<b>AL.HS.B.</b>	<b>BIOLOGY</b>
<b>OBJECTIVE / CATEGORY</b>		<b>Ecosystems: Interactions, Energy, and Dynamics</b>
<b>STANDARD</b>	<b>HS.B.7.</b>	Develop and use models to illustrate examples of ecological hierarchy levels, including biosphere, biome, ecosystem, community, population, and organism.  <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
<b>STANDARD</b>	<b>HS.B.8.</b>	Develop and use models to describe the cycling of matter (e.g., carbon, nitrogen, water) and flow of energy (e.g., food chains, food webs, biomass pyramids, ten percent law) between abiotic and biotic factors in 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>STANDARD</b>	<b>HS.B.9.</b>	Use mathematical comparisons and visual representations to support or refute explanations of factors that affect population growth (e.g., exponential, linear, logistic).  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
<b>STANDARD</b>	<b>HS.B.10.</b>	Construct an explanation and design a real-world solution to address changing conditions and ecological succession caused by density-dependent and/or density-independent factors.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
<b>STRAND / DOMAIN</b>	<b>AL.HS.B.</b>	<b>BIOLOGY</b>
<b>OBJECTIVE / CATEGORY</b>		<b>Unity and Diversity</b>
<b>STANDARD</b>	<b>HS.B.16.</b>	Analyze scientific evidence (e.g., DNA, fossil records, cladograms, biogeography) to support hypotheses of common ancestry and

		<p>biological evolution.</p> <p><u>Virtual Field Trips</u> Galapagos Islands - Espagnol</p>
<b>STRAND / DOMAIN</b>	<b>AL.HS.P.</b>	<b>PHYSICS</b>
<b>OBJECTIVE / CATEGORY</b>		<b>Motion and Stability: Forces and Interactions</b>
<b>STANDARD</b>	<b>HS.P.1.</b>	<p>Investigate and analyze, based on evidence obtained through observation or experimental design, the motion of an object using both graphical and mathematical models (e.g., creating or interpreting graphs of position, velocity, and acceleration versus time graphs for one- and two-dimensional motion; solving problems using kinematic equations for the case of constant acceleration) that may include descriptors such as position, distance traveled, displacement, speed, velocity, and acceleration.</p> <p><u>Virtual Field Trips</u> National Parks - West - Alaska &amp; Hawaii</p>
<b>STRAND / DOMAIN</b>	<b>AL.HS.ESS.</b>	<b>EARTH AND SPACE SCIENCE</b>
<b>OBJECTIVE / CATEGORY</b>		<b>Earth's Systems</b>
<b>STANDARD</b>	<b>HS.ESS.7.</b>	<p>Analyze and interpret evidence regarding the theory of plate tectonics, including geologic activity along plate boundaries and magnetic patterns in undersea rocks, to explain the ages and movements of continental and oceanic crusts.</p> <p><u>Virtual Field Trips</u> National Parks - West - Alaska &amp; Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1</p>
<b>STANDARD</b>	<b>HS.ESS.9.</b>	<p>Obtain, evaluate, and communicate information to explain how constructive and destructive processes (e.g., weathering, erosion, volcanism, orogeny, plate tectonics, tectonic uplift) shape Earth's land features (e.g., mountains, valleys, plateaus) and sea features (e.g., trenches, ridges, seamounts).</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</p>
<b>STANDARD</b>	<b>HS.ESS.13.</b>	<p>Analyze and interpret data of interactions between the hydrologic and rock cycles to explain the mechanical impacts (e.g., stream transportation and deposition, erosion, frost-wedging) and chemical impacts (e.g., oxidation, hydrolysis, carbonation) of Earth materials by water's properties.</p> <p><u>Virtual Field Trips</u> National Parks - West - Alaska &amp; Hawaii National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1</p>
<b>STANDARD</b>	<b>HS.ESS.14.</b>	<p>Construct explanations from evidence to describe how changes in the flow of energy through Earth's systems (e.g., volcanic eruptions, solar output, ocean circulation, surface temperatures, precipitation patterns, glacial ice volumes, sea levels, Coriolis effect) impact the climate.</p> <p><u>Virtual Field Trips</u> La Selva Amazonica - Pte 1 (En Espagnol) National Parks - West - Alaska &amp; Hawaii National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades</p>

STRAND / DOMAIN	AL.HS.ES.	ENVIRONMENTAL SCIENCE
OBJECTIVE / CATEGORY		Earth and Human Activity
STANDARD	HS.ES.1.	<p>Investigate and analyze the use of nonrenewable energy sources (e.g., fossil fuels, nuclear, natural gas) and renewable energy sources (e.g., solar, wind, hydroelectric, geothermal) and propose solutions for their impact on the environment.</p> <p><u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades</p>
STANDARD	HS.ES.4.	<p>Engage in argument from evidence to evaluate how biological or physical changes within ecosystems (e.g., ecological succession, seasonal flooding, volcanic eruptions) affect the number and types of organisms, and that changing conditions may result in a new or altered ecosystem.</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>
STANDARD	HS.ES.5.	<p>Engage in argument from evidence to compare how individual versus group behavior (e.g., flocking; cooperative behaviors such as hunting, migrating, and swarming) may affect a species' chance to survive and reproduce over time.</p> <p><u>Virtual Field Trips</u> National Parks - West - Alaska &amp; Hawaii National Parks West - Wyoming, Utah</p>
STANDARD	HS.ES.6.	<p>Obtain, evaluate, and communicate information to describe how human activity may affect biodiversity and genetic variation of organisms, including threatened and endangered species.</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>
STANDARD	HS.ES.7.	<p>Analyze and interpret data to investigate how a single change on Earth's surface may cause changes to other Earth systems (e.g., loss of ground vegetation causing an increase in water runoff and soil erosion).</p> <p><u>Virtual Field Trips</u> National Parks - West - Alaska &amp; Hawaii National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1</p>
STANDARD	HS.ES.8.	<p>Engage in an evidence-based argument to explain how over time Earth's systems affect the biosphere and the biosphere affects Earth's systems (e.g., microbial life increasing the formation of soil; corals creating reefs that alter patterns of erosion and deposition along coastlines).</p> <p><u>Virtual Field Trips</u></p>

		La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
STANDARD	HS.ES.9.	Develop and use models to trace the flow of water, nitrogen, and phosphorus through the hydrosphere, atmosphere, geosphere, and biosphere.  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
STANDARD	HS.ES.11.	Engage in argument from evidence to defend how coastal, marine, and freshwater sources (e.g., estuaries, marshes, tidal pools, wetlands, beaches, inlets, rivers, lakes, oceans, coral reefs) support biodiversity, economic stability, and human recreation.  <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
STANDARD	HS.ES.12.	Analyze and interpret data and climate models to predict how global or regional climate change can affect Earth's systems (e.g., precipitation and temperature and their associated impacts on sea level, glacial ice volumes, and atmosphere and ocean composition).  <u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii National Parks of the Western Region - Part 1
STANDARD	HS.ES.13.	Obtain, evaluate, and communicate information based on evidence to explain how key natural resources (e.g., water sources, fertile soils, concentrations of minerals and fossil fuels), natural hazards, and climate changes influence human activity (e.g., mass migrations).  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks - West - Alaska & Hawaii The Amazon Rainforest - Part 2 - Older Grades
STANDARD	HS.ES.15.	Construct an explanation based on evidence to determine the relationships among management of natural resources, human sustainability, and biodiversity (e.g., resources, waste management, per capita consumption, agricultural efficiency, urban planning).  <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
STANDARD	HS.ES.16.	Obtain and evaluate information from published results of scientific computational models to illustrate the relationships among Earth's systems and how these relationships may be impacted by human activity (e.g., effects of an increase in atmospheric carbon dioxide on photosynthetic biomass, effect of ocean acidification on marine populations).  <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
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**Alabama Courses of Study  
Social Studies**

Grade: 9 - Adopted: 2013

<b>STRAND / DOMAIN</b>	<b>AL.9-12.S.</b>	<b>Sociology</b>
<b>OBJECTIVE / CATEGORY</b>	<b>9-12.S.3.</b>	<b>Describe how values and norms influence individual behavior.</b>
<b>STANDARD</b>	<b>9-12.S.3.2.</b>	Comparing the use of various symbols within and across societies.  <u>Virtual Field Trips</u> Washington, DC - Grades 6 - 12
<b>STRAND / DOMAIN</b>	<b>AL.9-12.S.</b>	<b>Sociology</b>
<b>OBJECTIVE / CATEGORY</b>	<b>9-12.S.9.</b>	<b>Explain the purpose of social systems and institutions, including schools, churches, voluntary associations, and governments.</b>
<b>STANDARD</b>	<b>9-12.S.9.1.</b>	Describing origins and beliefs of various religions.  <u>Virtual Field Trips</u> Jerusalem - Then and Now (Older Grades)
<b>STRAND / DOMAIN</b>	<b>AL.9-12.CWI.</b>	<b>Contemporary World Issues and Civic Engagement</b>
<b>OBJECTIVE / CATEGORY</b>	<b>9-12.CWI.2.</b>	<b>Compare the relationship of governments and economies to events occurring in specific nations.</b>
<b>STANDARD</b>	<b>9-12.CWI.2.1.</b>	Identifying recurring historical patterns in regions around the world.  <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>OBJECTIVE / CATEGORY</b>	<b>9-12.CWI.5.</b>	Analyze cultural elements, including language, art, music, literature, and belief systems, to determine how they facilitate global understanding or misunderstanding.  <u>Virtual Field Trips</u> Jerusalem - Then and Now (Older Grades)
<b>STRAND / DOMAIN</b>	<b>AL.9-12.HG.</b>	<b>Human Geography</b>
<b>OBJECTIVE / CATEGORY</b>	<b>9-12.HG.3.</b>	<b>Identify the characteristics, distribution, and complexity of Earth's cultural mosaics.</b>
<b>STANDARD</b>	<b>9-12.HG.3.1.</b>	Explaining essential aspects of culture, including social structure, languages, belief systems, customs, religion, traditions, art, food, architecture, and technology.  <u>Virtual Field Trips</u> Barcelona - English Barcelona - Espagnol Jerusalem - Then and Now (Older Grades) La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades
<b>STRAND / DOMAIN</b>	<b>AL.9-12.HG.</b>	<b>Human Geography</b>
<b>OBJECTIVE / CATEGORY</b>	<b>9-12.HG.4.</b>	<b>Describe elements of the landscape as a mirror of culture.</b>
<b>STANDARD</b>	<b>9-12.HG.4.1.</b>	Explaining how landscapes reflect cultural traits and preferences.  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades

STANDARD	9-12.HG.4.2.	Distinguishing various types of architecture, including rural, urban, and religious structures.  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
STRAND / DOMAIN	AL.9-12.HG.	Human Geography
OBJECTIVE / CATEGORY	9-12.HG.6.	Explain how religion influences cultures around the globe.
STANDARD	9-12.HG.6.1.	Identifying major religions, their source areas, and spatial expansion.  <u>Virtual Field Trips</u> Jerusalem - Then and Now (Older Grades)
STANDARD	9-12.HG.6.3.	Describing how religion influences political views around the world.  <u>Virtual Field Trips</u> Jerusalem - Then and Now (Older Grades)
OBJECTIVE / CATEGORY	9-12.HG.10.	Recognize how human-environmental interaction affects culture in today's society.  <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
STRAND / DOMAIN	AL.9-12.HG.	Human Geography
OBJECTIVE / CATEGORY	9-12.HG.14.	Describe how tourism shapes cultural traditions and population growth.
STANDARD	9-12.HG.14.2.	Identifying how trends, including ecotourism and the cruise industry, affect island culture in tropical areas.  <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
STRAND / DOMAIN	AL.9-12.ACT.	ACT Course Standards - U.S. HISTORY
OBJECTIVE / CATEGORY	9-12.ACT.A.	Exploring the Skills and Strategies Underlying U.S. History
STANDARD	9-12.ACT.A.1.	Process Skills
RELATED CONTENT / EXPECTATION	9-12.ACT.A.1.d.	Analyze the importance of context and point of view in historical interpretation (e.g., interpret past events and issues in historical context rather than in terms of present norms and values); recognize that historians interpret the same events differently due to personal values and societal norms.  <u>Virtual Field Trips</u> Washington, DC - Grades 6 - 12
RELATED CONTENT / EXPECTATION	9-12.ACT.A.1.i.	Identify, analyze, and understand elements of historical cause and effect; recognize and understand patterns of change and continuity in history.  <u>Virtual Field Trips</u> Washington, DC - Grades 6 - 12
RELATED CONTENT / EXPECTATION	9-12.ACT.A.1.k.	Analyze how the past influences the lives of individuals and the development of societies.  <u>Virtual Field Trips</u> Washington, DC - Grades 6 - 12