

APPENDIX V – 59

AP in the Freshman Year

When most people think about AP classes, they think about overwhelming work load and an impossible test. So to ask freshmen to take two of these classes may sound overwhelming!! Both of these courses are often taught as semester long classes to older students and by us teaching them over a year we are able to reduce the pressure of the content and spend time enriching the experience our students have in social studies and science!

UHS students have an intellectual curiosity to understand the world around them and the courses we require students to take in the freshman year equip them to do so. They provide a foundation of concepts and skills that will make the rest of their high school career easier. Students are already commenting on how AP Human Geography is helping them in both AP World History and AP European History classes!

In many ways, UHS freshmen will be taking 1.5 AP classes, not 2! **Both AP Human Geography and AP Environmental Science study the relationship between humans and the Earth.** These courses simply consider this relationship from different points of view! This means that students will learn the same concepts in multiple ways, cementing their understanding. The Science and Social Studies departments plan will coordinator lessons to help students make the connections. Our first year offering APHG our students scored 14% above the global average for passing scores! The addition of APES will just cause that number to increase. Below is a comparison of the course outlines of APES and APHG, as provided by the College Board.

AP ENVIORNMENTAL SCIENCE	AP HUMAN GEOGRAPHY
I. Earth Systems and Resources (10–15%) A. Earth Science Concepts <ul style="list-style-type: none"> • Geologic time scale; plate tectonics, earthquakes, volcanism; seasons; solar intensity and latitude B. The Atmosphere C. Global Water Resources and Use D. Soil and Soil Dynamics	I. Geography: Its Nature and Perspectives (5%–10%) A. Geography as a field of inquiry B. Concepts: location, space, place, scale, pattern, nature and society, regionalization, globalization, and gender issues C. Key geographical skills D. Use of geospatial technologies E. Sources of geographical information and ideas F. Identification of major world regions
II. The Living World (10–15%) A. Ecosystem Structure B. Energy Flow <ul style="list-style-type: none"> • Photosynthesis and cellular respiration; food webs and trophic levels; ecological pyramids C. Ecosystem Diversity <ul style="list-style-type: none"> • Biodiversity; natural selection; evolution D. Natural Ecosystem Change E. Natural Biogeochemical Cycles	I. Geography: Its Nature and Perspectives (5%–10%) A. Geography as a field of inquiry B. Major geographical concepts underlying the geographical perspective: C. Key geographical skills D. Use of geospatial technologies, GPS, and online maps E. Sources of geographical information and ideas F. Identification of major world regions
III. Population (10–15%) A. Population Biology Concepts B. Human Population <ol style="list-style-type: none"> 1. Human population dynamics 2. Population size 3. Impacts of population growth 	II. Population (13%–17%) A. Geographical analysis of population <ol style="list-style-type: none"> 1. Density, distribution, scale, Composition 2. Patterns of fertility, mortality and health B. Population growth and decline C. Migration III. Cultural Patterns and Processes (13%–17%) A. Concepts of culture <ol style="list-style-type: none"> 1. Cultural traits, diffusion, regions 2. Globalization and the effects of technology B. Cultural differences and regional patterns C. Cultural landscapes and cultural identity IV. Political Organization of Space (13%–17%) A. Territorial dimensions of politics B. Evolution of the contemporary political pattern

<p>IV. Land and Water Use (10–15%)</p> <p>A. Agriculture</p> <ol style="list-style-type: none"> 1. Feeding a growing population <ul style="list-style-type: none"> • Human nutritional requirements; types of agriculture; Green Revolution; genetic engineering and crop production; sustainable agriculture 2. Controlling pests <p>B. Forestry; Rangelands; Mining; Fishing</p> <p>D. Other Land Use</p> <ul style="list-style-type: none"> • Urban land development, Transportation infrastructure, Public and federal lands, Land conservation options, Sustainable land-use <p>G. Global Economics</p>	<p>V. Agricultural and Rural Land Use (13%–17%)</p> <ol style="list-style-type: none"> A. Development and diffusion of agriculture B. Major agricultural production regions <ol style="list-style-type: none"> 1. Agricultural systems in major bioclimatic zones C. Rural land use and settlement patterns <ol style="list-style-type: none"> 1. Models of agriculture land use D. Issues in contemporary commercial agriculture <p>VII. Cities and Urban Land Use (13%–17%)</p> <ol style="list-style-type: none"> A. Development and characters of cities <ol style="list-style-type: none"> 1. Urbanization, Suburbanization, Megacities B. Reasons for the distribution and size of cities C. Models of internal city structure and urban development D. Built environment and social space E. Contemporary urban issues
<p>V. Energy Resources and Consumption (10–15%)</p> <ol style="list-style-type: none"> A. Energy Concepts B. Energy Consumption <ul style="list-style-type: none"> • History, Present global energy use, Future energy needs C. Fossil Fuel Resources and Use <ul style="list-style-type: none"> • Formation of coal, oil, and natural gas; world reserves and global demand D. Nuclear Energy; Hydroelectric Power; Energy Conservation; Renewable Energy 	<p>VI. Industrialization and Economic Development (13%–17%)</p> <ol style="list-style-type: none"> A. Growth and diffusion of industrialization <ol style="list-style-type: none"> 1. Changing roles of energy and technology 2. Industrial revolution 3. Models of economic development 4. Geographic critiques of models of industrial location B. Social and economic measures of development C. Contemporary patterns and impacts of industrialization and development
<p>VI. Pollution (25–30%)</p> <ol style="list-style-type: none"> A. Pollution Types <ul style="list-style-type: none"> • Air pollution, Noise pollution, Water pollution, Solid waste B. Impacts on the Environment and Human Health <ol style="list-style-type: none"> 1. Hazards to human health 2. Hazardous chemicals in the environment <ul style="list-style-type: none"> • Types of hazardous waste; treatment/disposal of hazardous waste; cleanup of contaminated sites C. C. Economic Impacts 	<p>VI. Industrialization and Economic Development (13%–17%)</p> <ol style="list-style-type: none"> A. Growth and diffusion of industrialization B. Social and economic measures of development C. Contemporary patterns and impacts of industrialization and development <ol style="list-style-type: none"> 1. Natural resource depletion, pollution, and climate change; Sustainable development; Government developmental policies <p>VII. Cities and Urban Land Use (13%–17%)</p> <ol style="list-style-type: none"> A. Development and characters of cities B. Reasons for the distribution and size of cities C. Models of internal city structure and urban development D. Built environment and social space E. Contemporary urban issues
<p>VII. Global Change (10–15%)</p> <ol style="list-style-type: none"> A. Stratospheric Ozone <ul style="list-style-type: none"> • Formation of stratospheric ozone; ultraviolet radiation; causes of ozone depletion; effects of ozone depletion; strategies for reducing ozone depletion; relevant laws and treaties B. Global Warming C. Loss of Biodiversity <ul style="list-style-type: none"> • Habitat loss; overuse; pollution; introduced species; endangered and extinct species • Maintenance through conservation 	<p>VI. Industrialization and Economic Development (13%–17%)</p> <ol style="list-style-type: none"> A. Growth and diffusion of industrialization B. Social and economic measures of development C. Contemporary patterns and impacts of industrialization and development <ol style="list-style-type: none"> 1. Natural resource depletion, pollution, and climate change 2. Sustainable development 3. Government developmental policies