

AP Environmental Science Curriculum (SCI 337/ 338)

Date		Hobbs Science Standards 11 th - 12 th Grade	NM Standards & Benchmarks	Resources Basic text is Cunningham & Saigo <u>Environmental Science: A Global Connection</u>
		By being embedded throughout the curriculum, these Processing Skills will be addressed throughout the year.		
		Students will be able to:	Strand, Standards, Benchmarks, & Performance Standards	Supplemental books, labs, videos, projects, digital curriculum
<hr/> <hr/> <hr/> <hr/>	1	<ol style="list-style-type: none"> 1. Describe the essential components of an investigation, including appropriate methodologies, proper equipment, and safety precautions. 2. Design and conduct scientific investigations that include: <ul style="list-style-type: none"> • Testable hypotheses • Controls and variables • Methods to collect, analyze, and interpret data • Results that address hypotheses being investigated • Predictions based on results • Re-evaluation of hypotheses and additional experimentation as necessary • Error analysis. 3. Use appropriate technologies to collect, analyze, and communicate scientific data (e.g., computers, calculators, balances, microscopes). 4. Convey results of investigations using scientific concepts, methodologies, and expressions, including: <ul style="list-style-type: none"> • Scientific language and symbols • Diagrams, charts, and other data displays • Mathematical expressions and processes (e.g., mean, median, slope, 	<p>I, I, I, 1</p> <p>I, I, I, 2</p> <p>I, I, I, 3</p> <p>I, I, I, 4</p>	

		<p>proportionality)</p> <ul style="list-style-type: none"> • Clear, logical, and concise communication • Reasoned arguments. <p>5. Understand how scientific theories are used to explain and predict natural phenomena (e.g., plate tectonics, ocean currents, structure of atom).</p>	I, I, I, 5	
	2	<p>1. Understand how scientific processes produce valid, reliable results, including:</p> <ul style="list-style-type: none"> • Consistency of explanations with data and observations • Openness to peer review • Full disclosure and examination of assumptions • Testability of hypotheses • Repeatability of experiments and reproducibility of results. <p>2. Use scientific reasoning and valid logic to recognize:</p> <ul style="list-style-type: none"> • Faulty logic • Cause and effect • The difference between observation and unsubstantiated inferences and conclusion • Potential bias <p>3. Understand how new data and observations can result in new scientific knowledge.</p> <p>4. Critically analyze an accepted explanation by reviewing current scientific knowledge.</p> <p>5. Examine investigations of current interest in science (e.g., superconductivity, molecular machines, age of the universe).</p> <p>6. Examine the scientific processes and logic used in investigations of past events (e.g., using data from crime scenes, fossils), investigations that can be planned in advance but are only done once (e.g., expensive or time-consuming experiments such as medical clinical trials), and investigations of phenomena that can be repeated easily and frequently.</p>	<p>I, I, II, 1</p> <p>I, I, II, 2</p> <p>I, I, II, 3</p> <p>I, I, II, 4</p> <p>I, I, II, 5</p> <p>I, I, II, 6</p>	

<hr/> <hr/> <hr/> <hr/> <hr/>	3	<ol style="list-style-type: none"> 1. Create multiple displays of data to analyze and explain the relationships in scientific investigations. 2. Use mathematical models to describe, explain, and predict natural phenomena. 3. Use technologies to quantify relationships in scientific hypotheses (e.g., calculators, computer spreadsheets and databases, graphing software, simulations, modeling). 4. <i>Identify and apply measurement techniques and consider possible effects of measurement errors.</i> 5. <i>Use mathematics to express and establish scientific relationships (e.g., scientific notation, vectors, dimensional analysis).</i> 	<p>I, I, III, 1</p> <p>I, I, III, 2</p> <p>I, I, III, 3</p> <p>I, I, III, 4</p> <p>I, I, III, 5</p>	
<hr/> <hr/> <hr/> <hr/>	4	<p style="text-align: center;">Science and Technology</p> <ol style="list-style-type: none"> 1. Know how science enables technology but also constrains it, and recognize the difference between real technology and science fiction (e.g., rockets vs. antigravity machines; nuclear reactors vs. perpetual-motion machines; medical X-rays vs. Star-Trek tricorders). 2. Understand how advances in technology enable further advances in science (e.g., microscopes and cellular structure; telescopes and understanding of the universe). 3. Evaluate the influences of technology on society (e.g., communications petroleum, transportation, nuclear energy, computers, medicine, genetic engineering) including both desired and undesired effects, and including some historical examples (e.g., the wheel, the plow, the printing press, the lightning rod). 4. Understand the scientific foundations of common technologies (e.g., kitchen appliances, radio, television, aircraft, rockets, computers, medical X-rays, selective breeding, fertilizers and pesticides, agricultural equipment). 5. Analyze the impact of digital technologies on the availability, creation, and 	<p>III, I, I, 1</p> <p>III, I, I, 2</p> <p>III, I, I, 3</p> <p>III, I, I, 4</p> <p>III, I, I, 6</p>	

		<p>dissemination of information.</p> <p>6. <i>Examine the role that New Mexico research facilities play in current space exploration (e.g., Very Large Array, Goddard Space Center).</i></p> <p>7. Describe uses of radioactivity (e.g. nuclear power, nuclear medicine, radiometric dating).</p> <p>8. Understand how knowledge about the universe comes from evidence collected from advanced technology (e.g., telescopes, satellites, images, computer models).</p> <p>9. <i>Describe the key observations that led to the acceptance of the Big Bang theory and that the age of the universe is over 10 billion years.</i></p>	<p>III, I, I, 7</p> <p>III, I, I, 8</p> <p>II, III, I, 3</p> <p>II, III, I, 4</p>	
	5	<p style="text-align: center;">Science and Society</p> <p>1. Describe how human activities have affected ozone in the upper atmosphere and how it affects health and the environment.</p> <p>2. Describe how scientific knowledge helps decision makers with local, national, and global challenges (e.g., Waste Isolation Pilot Project [WIPP], mining, drought, population growth, alternative energy, climate change).</p> <p>3. Describe major historical changes in scientific perspectives (e.g., atomic theory, germs, cosmology, relativity, plate tectonics, evolution) and the experimental observations that triggered them.</p> <p>4. Know that societal factors can promote or constrain scientific discovery (e.g., government funding, laws and regulations about human cloning and genetically modified organisms, gender and ethnic bias, AIDS research, alternative-energy research).</p> <p>5. Describe how environmental, economic, and political interests impact resource management and use in New Mexico.</p>	<p>III, I, I, 7</p> <p>III, I, I, 9</p> <p>III, I, I, 10</p> <p>III, I, I, 11</p> <p>III, I, I, 13</p>	

	6	Science and Individuals		
<hr/>		1. <i>Describe New Mexico's role in nuclear science (e.g., Manhattan Project, WIPP, national laboratories).</i>	III, I, I, 14	
<hr/>		2. Identify how science has produced knowledge that is relevant to individual health and material prosperity.	III, I, I, 15	
<hr/>		3. Understand that reasonable people may disagree about some issues that are of interest to both science and religion (e.g., the origin of life on Earth, the cause of the Big Bang, the future of Earth).	III, I, I, 16	
<hr/>		4. Identify important questions that science cannot answer (e.g., questions that are beyond today's science, decisions that science can only help to make, questions that are inherently outside the realm of science).	III, I, I, 17	
<hr/>		5. Understand that scientists have characteristics in common with other individuals (e.g., employment and career needs, curiosity, desire to perform public service, greed, preconceptions and biases, temptation to be unethical, core values, including honesty and openness).	III, I, I, 18	
<hr/>		6. Know that science plays a role in many different kinds of careers and activities (e.g., public service, volunteers, public office holders, researchers, teachers, doctors, nurses, technicians, farmers, ranchers).	III, I, I, 19	

AP Environmental Science Curriculum (SCI 337/ 338)

(1st 9 weeks- 1st 4 ½ weeks)

Date		Hobbs Science Standards 11 th - 12 th Grade	NM Standards & Benchmarks	Resources
		Students will be able to:	Strand, Standards, Benchmarks, & Performance Standards	Supplemental books, labs, videos, projects, digital curriculum
<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	7	<p style="text-align: center;">Interdependence of Earth’s Systems</p> <p>Flow of Energy</p> <ol style="list-style-type: none"> 1. Define energy. 2. Define energy in terms of units. 3. Describe energy transformations. 4. Describe forms and quality of energy in ecosystems. 5. Calculate energy conversions using data obtained from ecosystems. 	<p>II, I, II, 1 II, I, II, 3 II, I, II, 4 II, I, II, 8 II, II, I, 5 II, II, I, 6 II, II, I, 7 II, III, II, 6</p>	
<p>_____</p> <p>_____</p> <p>_____</p>	8	<p>Cycling of Matter</p> <ol style="list-style-type: none"> 1. Describe the importance of water to ecosystems. 2. Describe the water cycle, identifying the components of ecosystems which are involved the water cycle. 3. Describe the importance of carbon to ecosystems. 	<p>II, II, I, 1- 5 II, III, II, 8 II, III, II, 9 II, III, II, 12</p>	

<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>		<ol style="list-style-type: none"> 4. Describe the carbon cycle, identifying components of ecosystems which are involved in the carbon cycle. 5. Describe photosynthesis and cellular respiration as components of the carbon cycle. 6. Describe the role of nitrogen and phosphorus in ecosystems. 7. Describe the cycling of nitrogen and phosphorus in ecosystems. 8. Explain the role of bacteria in the cycling of nitrogen. 9. Differentiate the cycling of major and trace elements. 		
<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>9</p>	<p>Solid Earth</p> <ol style="list-style-type: none"> 1. Describe the geologic benchmarks which can be used to identify change. 2. Develop a time line which reflects the major geologic eras of the Earth's history. 3. Describe the Earth's surface as a dynamic structure. 4. Define plate tectonics. 5. Explain the role of plate tectonics in the changes of the Earth's surface. 6. Explain the mechanism of volcanic activity. 7. Explain the role of volcanism in the changes of the Earth's surface. 8. Explain how processes such as plate tectonics and volcanism cycle soil and rock. 9. Describe the processes involved in the formation and cycling of soil. 	<p>II, III, II, 1- 5 II, III, II, 6- 8 II, III, II, 9- 10</p>	

<hr/> <hr/> <hr/> <hr/>	10	Atmosphere 1. Define the atmosphere in terms of its layers and molecules/components typically found in each layer. 2. Hypothesize the origin and evolution of the atmosphere. 3. Hypothesize the impact of living organisms on the evolution of the atmosphere. 4. Explain the roles of weather and climate as components of the atmosphere.	II, III, II, 1 II, III, II, 8 II, III, II, 9 II, III, II, 11 II, III, II, 12	
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AP Environmental Science Curriculum (SCI 337/ 338)

(1st 9 weeks- 2nd 4 ½ weeks)

Date		Hobbs Science Standards 11 th - 12 th Grade	NM Standards & Benchmarks	Resources
		Students will be able to:	Strand, Standards, Benchmarks, & Performance Standards	Supplemental books, labs, videos, projects, digital curriculum
<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	11	<p style="text-align: center;">Interdependence of Earth’s Systems</p> <p>Biosphere</p> <ol style="list-style-type: none"> 1. Define an organism. 2. Explain the roles of organisms within ecosystems. 3. Describe the processes used by organisms to adapt to long-term and short-term changes in their environments. 4. Explain the need for organismal adaptation. 5. Differentiate between populations and communities. 6. Explain the interactions of populations. 7. Explain the interactions of communities. 8. Describe the factors which would lead to population growth. 9. Define exponential growth of populations. 	<p>II, II, I, 1- 4 II, II, I, 5- 6 II, II, I, 8- 9 II, II, II, 8- 13</p>	<p style="text-align: center;">Basic text is Cunningham & Saigo <u>Environmental Science: A Global Connection</u></p>

_____	10. Use hypothetical population data to predict exponential growth of populations.		
_____	11. Define carrying capacity of an ecosystem.		
_____	12. Describe factors which could limit or promote carrying capacity of an ecosystem.		
_____	13. Describe the factors which could limit or promote exponential population growth.		
_____	14. Predict the effects of environmental change on ecosystems and populations.		
_____	15. Define biomass.		
_____	16. Explain the biotic and abiotic mechanisms which cause energy transfer within ecosystems.		
_____	17. Describe the process of succession in changing ecosystems.		
_____	18. Describe the five basic tenets of natural selection.		
_____	19. Explain how each of the properties of natural selection could result in change in the organisms of a population.		
_____	20. Develop a timeline which illustrates natural selection in a living organism, listing the environmental changes which would cause changes.		
_____	21. Define extinctions.		
_____	22. Use the geological history of the earth to specify periods of extinction.		
_____	23. Correlate changes in the earth's geology with extinctions and incidences of natural selection.		

AP Environmental Science Curriculum (SCI 337/ 338)

(2nd 9 weeks- 3rd 4 ½ weeks)

Date		Hobbs Science Standards 11 th - 12 th Grade	NM Standards & Benchmarks	Resources
		Students will be able to:	Strand, Standards, Benchmarks, & Performance Standards	Supplemental books, labs, videos, projects, digital curriculum
<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	12	<p style="text-align: center;">Human Population Dynamics</p> <p>History of Human Populations</p> <ol style="list-style-type: none"> 1. Hypothesize the origin of human beings. 2. Develop a timeline tracing the development of human beings. 3. Describe the environmental and ecological changes which caused changes in human beings. 4. Describe the migration of human populations from continent to continent. 5. Differentiate human populations in different ecosystems and on different continents according to appearance. 6. Explain the adaptations which human beings have undergone that enable them to live in different ecosystems. 	<p>II, II, I, 1- 4 II, II, I, 5- 6 II, II, I, 8- 9 II, II, II, 8- 13</p>	
<p>_____</p>	13	<p>Global Distribution of Populations</p> <ol style="list-style-type: none"> 1. Describe the numerical and demographic distribution of human populations. 	<p>II, II, I, 1- 4 II, II, I, 5- 6</p>	

<hr/> <hr/>		<p>2. Differentiate how populations in different ecosystems utilize resources.</p> <p>3. Describe the effect of human utilization of natural resources on the ecosystems in which they live.</p>	<p>II, II, I, 8- 9 II, II, II, 8- 13</p>	
<hr/> <hr/>	<p>14</p>	<p>Carrying Capacity</p> <p>1. Describe the human carrying capacity of local, regional, and global ecosystems.</p> <p>2. Describe factors which could affect human carrying capacity at each level of an ecosystem.</p>	<p>II, II, I, 1- 4 II, II, I, 5- 6 II, II, I, 8- 9 II, II, II, 8- 13</p>	
<hr/> <hr/> <hr/> <hr/>	<p>15</p>	<p>Cultural and Economic Influences</p> <p>1. Describe cultural and economic factors which could influence the balance of human populations.</p> <p>2. Hypothesize the effects of changing cultural and economic factors on the balance of human populations.</p> <p>3. Describe cultural and economic factors which could human populations to become unstable.</p> <p>4. Hypothesize the destabilizing effects of changes in cultural and economic factors on human populations.</p>	<p>II, II, I, 1- 4 II, II, I, 5- 6 II, II, I, 8- 9 II, II, II, 8- 13</p>	

AP Environmental Science Curriculum (SCI 337/ 338)

(2nd 9 weeks- 4th 4 ½ weeks)

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		Students will be able to:	Strand, Standards, Benchmarks, & Performance Standards	Supplemental books, labs, videos, projects, digital curriculum
<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	16	<p style="text-align: center;">Renewable and Non-Renewable Resources</p> <p>Water</p> <ol style="list-style-type: none"> 1. Differentiate fresh and domestic water based on their origin, composition, and use. 2. Explain the agricultural uses of fresh water. 3. Predict the effects of different sources of pollution on fresh water. 4. Explain the industrial uses of fresh water. 5. Explain the methods for purifying industrially used fresh water. 6. Describe the re-introduction of industrially used fresh water into the environment. 7. Explain the roles of water in oceans in maintaining life forms, regulating temperatures, and cycling major and trace elements. 8. Describe the use of ocean water in fish hatcheries. 	<p>II, II, I, 4 II, III, II, 9 II, III, II, 12</p>	<p>Basic text is Cunningham & Saigo <u>Environmental Science: A Global Connection</u></p>

_____		<p>9. Explain the importance of proper environmental water in the growth and development of fish and other water-dwelling organisms.</p> <p>10. Explain the industrial uses of ocean water.</p> <p>11. Explain the importance of cleaning industrially used ocean water.</p>		
_____	17	<p>Minerals</p> <p>1. Name the significant minerals which must be in supply for biotic and abiotic use.</p> <p>2. Explain the impact of deficiencies of major minerals on biotic and abiotic mechanisms.</p>	<p>II, III, II, 9 II, III, II, 10</p>	
_____	18	<p>Soils</p> <p>1. Differentiate soil types based on their composition and locations.</p> <p>2. Explain how different soils are suited to the environments in which they are found.</p> <p>3. Define erosion.</p> <p>4. Name biotic and abiotic factors which result in soil erosion.</p> <p>5. Describe the long-term effects of un-checked soil erosion.</p> <p>6. Describe mechanisms for the prevention of erosion and conservation of soil.</p>	<p>II, III, II, 9 II, III, II, 10</p>	
_____	19	<p>Biological</p> <p>1. Explain the importance of maintaining natural resources and environmentally sensitive areas.</p> <p>2. Describe factors which could affect the maintenance of natural areas.</p>	<p>II, II, I, 3 II, II, I, 4 II, III, II, 9 II, III, II, 10 II, III, II, 11 II, III, II, 12</p>	

<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>		<p>3. Hypothesize the effects of biotic and abiotic factors on natural areas.</p> <p>4. Develop a strategy for the reclamation of damaged natural areas.</p> <p>5. Explain the genetic diversity of organisms in different ecosystems.</p> <p>6. Describe mechanisms which could lead to genetic diversity.</p> <p>7. Describe the proper growth of food and agricultural products, including the reclamation of soil and agricultural resources.</p>		
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	20	<p>Energy</p> <p>1. Name conventional energy sources and describe their sources.</p> <p>2. Describe factors which could affect the availability of conventional energy sources.</p> <p>3. Name alternative energy sources and describe their sources and development.</p> <p>4. Explain how alternative energy sources substitute for the use of conventional energy sources.</p> <p>5. Describe limiting factors for both conventional and alternative energy sources.</p>	<p>II, I, II, 1 II, I, II, 3</p>	
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	21	<p>Land</p> <p>1. Describe the use of land and soil in residential and commercial situations.</p> <p>2. Explain the importance of proper reclamation of land and soil after their use in residential and commercial situations.</p> <p>3. Describe the use of land and soil for agricultural and forest growth.</p> <p>4. Explain the importance of proper reclamation of land soil after their use for agricultural and forest growth.</p>	<p>II, II, I, 3 II, II, I, 4 II, III, II, 9 II, III, II, 12</p>	

<hr/>		5. Differentiate between recreational and wilderness lands in terms of their use. 6. Explain the impact of biotic and abiotic factors on wilderness areas.		
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(3rd 9 weeks- 5th 4 ½ weeks)

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		Students will be able to:	Strand, Standards, Benchmarks, & Performance Standards	Supplemental books, labs, videos, projects, digital curriculum
<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	22	<p style="text-align: center;">Environmental Quality</p> <p>Air, Water and Soil</p> <ol style="list-style-type: none"> 1. Name the major pollutants, such as SO₂, NO_x, and pesticides, and explain their impacts on ecosystems and populations. 2. Explain the long-term effects of pollutants on domestic and non-domestic living organisms. 3. Explain the long-term effects of pollutants on aquatic systems. 4. Describe the effects of pollutants on natural and man-made features and structures. 5. Differentiate point and non-point sources of pollution. 6. Develop a strategy to limit pollution caused by point and non-point sources of pollution. 7. Describe the methods of measurement of naturally occurring chemicals and pollutants. 	<p>II, I, I, 2 II, I, I, 3 II, II, I, 3 II, II, I, 4 II, III, II, 9 II, III, II, 12</p>	<p style="text-align: center;">Basic text is Cunningham & Saigo <u>Environmental Science: A Global Connection</u></p>

_____		8. Analyze data obtained from the measurement of naturally occurring chemicals and pollutants using proper units of measurement.		
_____		9. Develop strategies to limit different types of pollution, remediate damaged portions of an ecosystem, and prevent the recurrence of the pollution.		

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<p>_____</p>	24	<p>Impact on Human Health</p> <ol style="list-style-type: none"> 1. Name and describe chemical environmental factors which impact human health. 	<p>II, I, I, 2 II, I, I, 3 II, II, I, 3</p>	

_____	2. Name and describe biological environmental factors which impact human health.	II, II, I, 4	
_____	3. Develop strategies which limit the negative impacts of chemical and biological environmental factors on human health.	II, III, II, 9	
_____	4. Differentiate the acute and chronic effects of environmental factors on human health.	II, III, II, 12	
_____	5. Correlate the impact of environmental factors on human health with the length and degree of human exposure to the factors.		
_____	6. Evaluate the relative risks of environmental factors on human health.		
_____	7. Develop responses to environmental factors which limit their negative impact on human health.		

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(4th 9 weeks- 7th 4 ½ weeks)

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<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	25	<p style="text-align: center;">Global Changes and Their Consequences</p> <p>First- Order Effects</p> <ol style="list-style-type: none"> 1. Define a first-order effect. 2. Explain the impact of first-order change on the components of the atmosphere. 3. Describe how levels of CO₂, CH₄, and stratospheric O₃ are impacted by first-order changes. 4. Explain how first-order changes impact oceanic temperatures. 5. Describe how oceanic currents are impacted by first-order changes. 6. Develop a strategy to limit the impact of first-order changes on oceans. 7. Explain how first-order changes can change biological habitats. 8. Describe the loss of biodiversity which can result from first-order change. 9. Describe the effect of introducing non-indigenous species into different 	<p>II, I, I, 2 II, I, I, 3 II, II, I, 3 II, II, I, 4 II, III, II, 9 II, III, II, 12</p>	<p style="text-align: center;">Basic text is Cunningham & Saigo <u>Environmental Science: A Global Connection</u></p>

<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>		<p>ecosystems.</p> <p>10. Define a higher-order interaction.</p> <p>11. Describe the interaction of plants with environmental CO₂.</p> <p>12. Explain the impact of ocean currents and climate on biological communities.</p> <p>13. Describe the factors which lead to changes in ocean currents and climate.</p> <p>14. Explain the effect of ultraviolet light on the cells of living organisms.</p> <p>15. Describe inherent mechanisms which living organisms employ to resist damage from ultraviolet light.</p> <p>16. Explain the limiting effects of man-made mechanisms to resist/limit damage from ultraviolet light.</p>		
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<p>_____</p> <p>_____</p> <p>_____</p>	26	<p style="text-align: center;">Environment and Society: Trade-Offs and Decision- Making</p> <p>Economic Forces</p> <ol style="list-style-type: none"> 1. Describe the economic forces which impact environmental developments and concerns. 2. Calculate the cost-benefit ratio of altering environmental factors for economic use. 3. Differentiate marginal, ownership, and externalized costs which impact use of the environment. 	<p>II, II, I, 3 II, II, I, 4 II, III, II, 9 II, III, II, 12</p>	
<p>_____</p> <p>_____</p>	27	<p>Cultural and Aesthetic Considerations</p> <ol style="list-style-type: none"> 1. Explain the force and impact of cultural influences on the use of environmental resources. 2. Explain the force and impact of aesthetic influences on the use of environmental resources. 	<p>II, II, I, 3 II, II, I, 4 II, III, II, 9 II, III, II, 12</p>	

	28	Environmental Ethics 1. Develop a rationale for the ethical use of environmental resources.	II, II, I, 3 II, II, I, 4 II, III, II, 9 II, III, II, 12	
	29	Environmental Laws and Regulations 1. Name the major laws and regulations used at differential governmental/societal levels which impact the environment and the use of environmental resources.	II, II, I, 3 II, II, I, 4 II, III, II, 9 II, III, II, 12	
	30	<p style="text-align: center;">Choices for the Future</p> Conservation 1. Describe the importance of environmental conservation for future generations. 2. Identify the major areas of conservation concern and develop a strategy to limit the impact of each concern.	II, II, I, 3 II, II, I, 4 II, III, II, 9 II, III, II, 12	
	31	Preservation 1. Describe mechanisms and projects which would effectively preserve endangered environments and organisms.	II, II, I, 3 II, II, I, 4 II, III, II, 9 II, III, II, 12	
	32	Remediation 1. Explain the need for remediation of damaged environments. 2. Develop plans for remediation of damaged environments.	II, II, I, 3 II, II, I, 4 II, III, II, 9 II, III, II, 12	
	33	Sustainability 1. Explain mechanisms for sustaining suitable and functioning environments and ecosystems.	II, II, I, 3 II, II, I, 4 II, III, II, 9 II, III, II, 12	

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