CORRELATION
FLORIDA DEPARTMENT OF EDUCATION
INSTRUCTIONAL MATERIALS CORRELATION
COURSE STANDARDS

SUBJECT:	**Science**
GRADE LEVEL:	**9-12**
COURSE TITLE:	**Environmental Science**
COURSE CODE:	**2001340**
SUBMISSION TITLE:	**Environmental Science: Your World , Your Turn (Withgott) © 2011**
TITLE ID:	**1808**
PUBLISHER:	**Pearson publishing as Prentice Hall**
PUBLISHER ID:	**22-1603684-03**

				Committee Member Evaluation				
				(Committee Member Use Only)				
BENCHMARK CODE	**BENCHMARK**	**DEPTH OF KNOWLEDGE**	**LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup for committee member.)**	**Thoroughly**	**Highly**	**Adequately**	**Minimally**	**Not At All**
HE.912.C.1.3	Evaluate how environment and personal health are interrelated.		SE: 256-277 TECH: DVD ch.10 SE FM: Florida Case Study FL40-41					
HE.912.C.1.4	Analyze how heredity and family history can impact personal health.		SE: 256-260 TECH: DVD ch.10					
LA.910.2.2.3	The student will organize information to show understanding or relationships among facts, ideas, and events (e.g., representing key points within text through charting, mapping, paraphrasing, summarizing, comparing, contrasting, or outlining);		SE: ALL CHAPTERS (ex. 222-223) TECH: DVD ch.7					
LA.910.4.2.2	The student will record information and ideas from primary and/or secondary sources accurately and coherently, noting the validity and reliability of these sources and attributing sources of information;		SE: 51, 122, 179, 220, 237, 251, 253, 289, 319, 346, 385, 411, 444, 473, 507 TECH: DVD ch.2, 4, 6, 8, 10, 11, 12, 13, 14, 15, 16					

MA.912.S.1.2	Determine appropriate and consistent standards of measurement for the data to be collected in a survey or experiment.	Moderate	SE: 14-20 TECH: DVD ch.1					
MA.912.S.3.2	Collect, organize, and analyze data sets, determine the best format for the data and present visual summaries from the following:	High	SE: Front Matter, pp. FL 32-FL 36					
	bar graphs		SE: FL 33, 61, 112, 167, 220, 222, 244, 302, 309, 327, 332, 341, 349, 431, 444, 449, 471, 530, 547, 552, 579, SH-12 TECH: DVD ALL CHAPTERS					
	line graphs		SE: FL 33, 8, 20, 88, 115, 132, 136, 161, 165, 169-79, 197, 208, 214, 229, 238, 240, 258, 289, 328, 374, 378, 385, 389, 473, 479, 493, 496, 507, 591, 609, SH-SH-10 TECH: DVD ALL CHAPTERS					
	stem and leaf plots		FL 34					
	circle graphs		SE: FL 33, 80, 293, 361, 376, 376, 379, 426, 453, 521, 551, 568, 583, SH-16 TECH: DVD ALL CHAPTERS					
	histograms		SE: FL 35, 167, 296 TECH: DVD ALL CHAPTERS					
	box and whisker plots		SE: FL 35–FL36					
	scatter plots		SE: FL 34, 37 (supply-demand) TECH: DVD ALL CHAPTERS					
	cumulative frequency (ogive) graphs		SE: FL 36					
	OTHER (triangle and area)		SE: 356, 527, 592 TECH: DVD ALL CHAPTERS					
SC.912.E.6.6	Analyze past, present, and potential future consequences to the environment resulting from various energy production technologies.	High	SE: 8-9, 144, 502-3, 522, 529-543 TECH: DVD ch.1, 5, 16, 17 SE FM: Florida Case Studies FL40-45					
SC.912.E.7.7	Identify, analyze, and relate the internal (Earth system) and external (astronomical) conditions that contribute to global climate change.	High	SE: 491-501 TECH: DVD ch.16 SE FM: Florida Case Study FL44-45					
SC.912.E.7.8	Explain how various atmospheric, oceanic, and hydrologic conditions in Florida have influenced and can influence human behavior, both individually and collectively.	High	SE: 145-146, 370 TECH: DVD ch. 5, 12 SE FM: Florida Case Studies FL40-47					
SC.912.E.7.9	Cite evidence that the ocean has had a significant influence on climate change by absorbing, storing, and moving heat, carbon, and water.	High	SE: 488-9 TECH: DVD ch.16 SE FM: Florida Case Study FL44-45					

SC.912.L.14.6	Explain the significance of genetic factors, environmental factors, and pathogenic agents to health from the perspectives of both individual and public health.	High	SE: 24-27, 256-266, 435-440, 462-468, 500-501, 530-531 TECH: DVD ch.1, 9, 14-17 SE FM: Florida Case Study FL40-41					
SC.912.L.15.3	Describe how biological diversity is increased by the origin of new species and how it is decreased by the natural process of extinction.	Moderate	SE: 131-132, 207-211 TECH: DVD ch.5, 7					
SC.912.L.15.13	Describe the conditions required for natural selection, including: overproduction of offspring, inherited variation, and the struggle to survive, which result in differential reproductive success.	Moderate	SE: 126-129 TECH: DVD ch.5					
SC.912.L.16.10	Evaluate the impact of biotechnology on the individual, society and the environment, including medical and ethical issues.	High	SE: 24-26, 228-229, 351, 375-377 TECH: DVD ch.1, 8, 12,					
SC.912.L.17.1	Discuss the characteristics of populations, such as number of individuals, age structure, density, and pattern of distribution.	Moderate	SE: 101-109, 232-233, 235-41 TECH: DVD ch.4, 8					
SC.912.L.17.4	Describe changes in ecosystems resulting from seasonal variations, climate change and succession.	Moderate	SE: 149-155, 169-180, 488-489, 497-501 TECH: DVD 5, 6, 16					
SC.912.L.17.5	Analyze how population size is determined by births, deaths, immigration, emigration, and limiting factors (biotic and abiotic) that determine carrying capacity.	High	SE: 110-117, 242-247 TECH: DVD ch.4, 8, Web 244					
SC.912.L.17.6	Compare and contrast the relationships among organisms, including predation, parasitism, competition, commensalism, and mutualism.	Moderate	SE: 133-140 TECH: DVD ch.5, Web 134					
SC.912.L.17.7	Characterize the biotic and abiotic components that define freshwater systems, marine systems and terrestrial systems.	Moderate	SE:182-188 TECH: DVD ch.6					
SC.912.L.17.8	Recognize the consequences of the losses of biodiversity due to catastrophic events, climate changes, human activity, and the introduction of invasive, non-native species.	High	SE: 125,132, 153-155, 207-211, 242-247, 497-499 TECH: DVD ch.5, 7, 8, 16, Web 244 SE FM: Florida Case Study FL 38-39					

SC.912.L.17.9	Use a food web to identify and distinguish producers, consumers, and decomposers. Explain the pathway of energy transfer through trophic levels and the reduction of available energy at successive trophic levels.	Moderate	SE: 141-148 TECH: DVD ch.5 SE FM: Florida Case Study FL40-41					
SC.912.L.17.10	Diagram and explain the biogeochemical cycles of an ecosystem, including water, carbon, and nitrogen cycle.	Moderate	SE: 81-89 TECH: DVD ch.3					
SC.912.L.17.11	Evaluate the costs and benefits of renewable and nonrenewable resources, such as water, energy, fossil fuels, wildlife, and forests.	High	SE: 7-10, 37-41, 204-206,242-247, 324-343, 420-434, 464-468, 491-496, 502-507, 520-541, 549-574 TECH: DVD ch.1,2, 7, 8, 11, 14, 15, 16, 17, 18, Web 244 SE FM: Florida Case Study FL44-45					
SC.912.L.17.12	Discuss the political, social, and environmental consequences of sustainable use of land.	High	SE: 39-41, 53-55, 215-217, 313, 342-343, 362-363 TECH: DVD ch.2, 7, 10, 11					
SC.912.L.17.13	Discuss the need for adequate monitoring of environmental parameters when making policy decisions.	High	SE: 19-20, 53-55, 469-475 TECH: DVD ch.1, 2, 15 SE FM: Florida Case Studies FL40-43, FL 46-47					
SC.912.L.17.14	Assess the need for adequate waste management strategies.	High	SE: 435-443, 582-605 TECH: DVD ch.14, 19 SE FM: Florida Case Study FL 40-41, 46-47					
SC.912.L.17.15	Discuss the effects of technology on environmental quality.	Moderate	SE: 351, 359-360, 363-364, 439-443 462-468, 470-5 TECH: DVD ch.12, 14, 15 SE FM: Florida Case Studies FL40-41, FL 44-45					
SC.912.L.17.16	Discuss the large-scale environmental impacts resulting from human activity, including waste spills, oil spills, runoff, greenhouse gases, ozone depletion, and surface and groundwater pollution.	High	SE: 369-370, 435-443, 462-468, 472-475 TECH: DVD ch.12, 14, 15, 16					
SC.912.L.17.18	Describe how human population size and resource use relate to environmental quality.	Moderate	SE: 7-10, 36-41, 82, 242-247,267-273, 293-304, 405-411 TECH: DVD ch.1, 2, 3, 8, 9, 10, 13, Web 244SE FM: Florida Case Study FL 46-47					
SC.912.L.17.19	Describe how different natural resources are produced and how their rates of use and renewal limit availability.	Moderate	SE: 7-10, 63 TECH: DVD 1, 2 SE FM: Florida Case Study FL44-45					

SC.912.L.17.20	Predict the impact of individuals on environmental systems and examine how human lifestyles affect sustainability.	High	SE: 82, 242-247, 359-364, 405-411 TECH: DVD ch.3, 8, 12, 13, Web 244 SE FM: Florida Case Studies FL 38-39, FL 42-43, FL 46-47					
SC.912.N.1.1	Define a problem based on a specific body of knowledge, for example: biology, chemistry, physics, and earth/space science, and do the following:	High	ALL CHAPTERS, SEE SPECIFIC PAGES BELOW					
	1. pose questions about the natural world,		SE: 3, 99, 419 TECH: DVD ch.1, 4, 14					
	2. conduct systematic observations,		SE: 3, 99 TECH: DVD ch.1, 4					
	3. examine books and other sources of information to see what is already known,		SE: 14-20 TECH: DVD ch.1					
	4. review what is known in light of empirical evidence,		SE: 14-20 TECH: DVD ch.1					
	5. plan investigations,		SE: 3 TECH: DVD ch.1					
	6. use tools to gather, analyze, and interpret data (this includes the use of measurement in metric and other systems, and also the generation and interpretation of graphical representations of data, including data tables and graphs),		SE: 51, 122, 179, 220, 237, 251, 253, 289, 319, 346, 385, 411, 444, 473, 507 TECH: DVD ch. 2, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16					
	7. pose answers, explanations, or descriptions of events,		SE: 3, 112, 144, 179, 214, 228, 302, 332, 349, 426, 471, 493, 530, 532, 601 TECH: DVD ch. 1, 4, 5, 7, 8, 10, 11, 12, 14, 15, 16, 17, 19, Web 427					
	8. generate explanations that explicate or describe natural phenomena (inferences),		SE: 3, 112, 144, 179, 214, 228, 302, 332, 349, 426, 471, 493, 530, 532, 601 TECH: DVD ch.1, 4, 5, 6, 7, 8, 10, 11, 12, 14, 15, 16, 17, 19, Web 427					
	9. use appropriate evidence and reasoning to justify these explanations to others,		SE: 3, 112, 144, 179, 214, 228, 302, 332, 349, 426, 471, 493, 530, 532, 601 TECH: DVD ch.1, 4, 5, 6, 7, 8, 10, 11, 12, 14, 15, 16, 17, 19					
	10. communicate results of scientific investigations, and		SE: 21-23 TECH: DVD ch.1					
	11. evaluate the merits of the explanations produced by others.		SE: 21-23 TECH: DVD ch.1					

SC.912.N.1.2	Describe and explain what characterizes science and its methods.	Moderate	SE: 12-13 TECH: DVD ch.1					
SC.912.N.1.3	Recognize that the strength or usefulness of a scientific claim is evaluated through scientific argumentation, which depends on critical and logical thinking, and the active consideration of alternative scientific explanations to explain the data presented.	Low	SE: 14-20 TECH: DVD ch.1					
SC.912.N.1.4	Identify sources of information and assess their reliability according to the strict standards of scientific investigation.	High	SE: 14-20 TECH: DVD ch.1					
SC.912.N.1.5	Describe and provide examples of how similar investigations conducted in many parts of the world result in the same outcome.	Moderate	SE: 14-20 TECH: DVD ch.1					
SC.912.N.1.6	Describe how scientific inferences are drawn from scientific observations and provide examples from the content being studied.	Moderate	SE:14-20 TECH: DVD ch.1 SE: Science Skills Handbook SH-18–SH-25					
SC.912.N.1.7	Recognize the role of creativity in constructing scientific questions, methods and explanations.	Low	SE: 14-20 TECH: DVD ch.1					
SC.912.N.2.1	Identify what is science, what clearly is not science, and what superficially resembles science (but fails to meet the criteria for science).	High	SE: 12-13 TECH: DVD ch.1					
SC.912.N.2.2	Identify which questions can be answered through science and which questions are outside the boundaries of scientific investigation, such as questions addressed by other ways of knowing, such as art, philosophy, and religion.	High	SE: 12-13 TECH: DVD ch.1					
SC.912.N.2.4	Explain that scientific knowledge is both durable and robust and open to change. Scientific knowledge can change because it is often examined and re-examined by new investigations and scientific argumentation. Because of these frequent examinations, scientific knowledge becomes stronger, leading to its durability.	High	SE: 14-20 TECH: DVD ch.1					

SC.912.N.2.5	Describe instances in which scientists' varied backgrounds, talents, interests, and goals influence the inferences and thus the explanations that they make about observations of natural phenomena and describe that competing interpretations (explanations) of scientists are a strength of science as they are a source of new, testable ideas that have the potential to add new evidence to support one or another of the explanations.	High	SE: 14-23 TECH: DVD ch.1					
SC.912.N.3.1	Explain that a scientific theory is the culmination of many scientific investigations drawing together all the current evidence concerning a substantial range of phenomena; thus, a scientific theory represents the most powerful explanation scientists have to offer.	High	SE: 21-23 TECH: DVD ch.1					
SC.912.N.3.5	Describe the function of models in science, and identify the wide range of models used in science.	Moderate	SE: 12-20,116-117, 147, 237, 264, 442-443, 493-494 TECH: DVD ch.1,4, 5, 8, 9, 14, 16					
SC.912.N.4.1	Explain how scientific knowledge and reasoning provide an empirically-based perspective to inform society's decision making.	Moderate	SE: 42-55, 212-219 TECH: DVD ch.2, 7 SE FM: Florida Case Studies FL 40-43, FL 46-47					
SC.912.N.4.2	Weigh the merits of alternative strategies for solving a specific societal problem by comparing a number of different costs and benefits, such as human, economic, and environmental.	High	SE: 50-55, 212-217, 502-507, 589-595 TECH: DVD ch.2, 7, 16, 19 SE FM: Florida Case Studies FL 44-47					
SC.912.P.10.1	Differentiate among the various forms of energy and recognize that they can be transformed from one form to others.	Moderate	SE: 141-143, 516-520 TECH: DVD ch.5, 17 SE FM: Florida Case Study FL 44-45					
SC.912.P.10.2	Explore the Law of Conservation of Energy by differentiating among open, closed, and isolated systems and explain that the total energy in an isolated system is a conserved quantity.	High	SE: 141-142 TECH: DVD ch.5					

				Committee Member Evaluation				
				(Committee Member Use Only)				
OVERALL INSTRUCTIONAL QUALITY			**IDENTIFY AN EXAMPLE (WITH PAGE NUMBERS OR LOCATION) DEEMED TYPICAL OF THE APPROACH TAKEN IN THE MAJOR TOOL.** **The Examples can be from Student or Teacher Instructional Material.**	**Strongly Agree**	**Agree**	**Disagree**	**Strongly Disagree**	
The major tool introduces and builds science concepts as a coherent whole. It provides opportunities to students to explore why a scientific idea is important and in which contexts that a science idea can be useful. In other words, the major tool helps students learn the science concepts in depth. Additionally, students are given opportunities to connect conceptual knowledge with procedural knowledge and factual knowledge. Overall, there is an appropriate balance of skill development and conceptual understanding.			SE: ALL CENTRAL CASES (ex. p64) TECH: AL DVDs					
Tasks are engaging and interesting enough that students want to pursue them. Real world problems are realistic and relevant to students' lives.			SE: 35, 51 TECH: DVD ch.2, Web 51					
Problem solving is encouraged by the tasks presented to students. Tasks require students to make decisions, determine strategies, and justify solutions.			SE: 222-223 TECH: DVD ch.7					
Tasks engage students in communicating science by writing, explaining, drawing, using symbols, talking, listening, and reading for information. Tasks encourage collaboration, discussion, individual accountability, and positive interdependence.			SE: 222-223 TECH: DVD ch.7					
Students are given opportunities to create and use representations to organize, record, and communicate their thinking. Tasks promote use of multiple representations and translations among them. Students use a variety of tools to understand a single concept.			SE: 211, 215 (ALL "REAL DATA") TECH: DVD ch.7					
The science connects to other disciplines such as reading, art, mathematics, and history. Tasks represent scientific ideas as interconnected and building upon each other.			SE: 227, 228-229 TECH: DVD ch.8					
Tasks require students to make hypotheses, justify their thinking, defend their responses by using scientific arguments, and prove scientific statements.			SE: ALL "WHAT DO YOU THINK" (p.205) TECH: DVD ch.7					
Benchmarks from the Nature of Science standard are both represented explicitly and integrated throughout the materials.			SE: 12-13 TECH: DVD ch.1					
Content provided that is NOT directly associated with NGSSS benchmarks for the course/grade level is less than approximately ten percent (10%). (Publishers must list ALL content here, not just examples.)								

CORRELATION
FLORIDA DEPARTMENT OF EDUCATION
INSTRUCTIONAL MATERIALS CORRELATION
ACCESS POINTS

SUBJECT: Science
GRADE LEVEL: 9-12
COURSE TITLE: Environmental Science
COURSE CODE: 2001340
SUBMISSION TITLE: Environmental Science: Your World , Your Turn (Withgott) © 2011
TITLE ID: 1808
PUBLISHER: Pearson publishing as Prentice Hall
PUBLISHER ID: 22-1603684-03

			Committee Member Evaluation (Committee Member Use Only)				
ACCESS POINT CODE	**ACCESS POINT DESCRIPTION**	**LESSONS WHERE ACCESS POINT IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup for committee member.)**	**Thoroughly**	**Highly**	**Adequately**	**Minimally**	**Not At All**
SC.912.N.1.In.a	Identify a problem based on a specific body of knowledge, including life science, earth and space science, or physical science, and do the following: 1. Identify a scientific question 2. Examine reliable sources of information to identify what is already k	SE: 3, 14-20 TECH: DVD ch.1					
SC.912.N.1.Su.b	Identify the basic process used in scientific investigations, including questioning, observing, recording, determining, and sharing results.	SE: 14-20, 21-22 TECH: DVD ch.1					
SC.912.N.1.Pa.c	Recognize that when a variety of common activities are repeated the same way, the outcomes are the same.	SE: 18-20, 21-22 TECH: DVD ch.1					
SC.912.N.2.In.a	Identify examples of investigations that involve science.	SE: 13-16, TECH: DVD ch.1					
SC.912.N.2.Su.b	Recognize that what is known about science can change based on new information.	SE: 14-20, 23 TECH: DVD ch.1					
SC.912.N.3.In.a	Recognize that a scientific theory is developed by repeated investigations of many scientists and agreement on the likely explanation.	SE: 24-25 TECH: DVD ch.1					
SC.912.N.3.Su.b	Recognize examples of scientific laws that describe relationships in nature, such as Newton's laws.	SE: 24 TECH: DVD ch.1					
SC.912.N.4.In.a	Identify ways scientific knowledge and problem solving benefit people.	SE: 25-29, 42-55, 212-218 TECH: DVD ch.1,2,7					

SC.912.N.4.Su.b	Recognize that some strategies may cost more to solve a problem.	SE: 50-55, 212-217, 502-507, 589-595 TECH: DVD ch.2, 7, 16, 18					
SC.912.E.7.In.a	Identify cycles that occur on Earth, such as the water and carbon cycles, and the role energy plays in them.	SE: 81-89 TECH: DVD ch.3					
SC.912.E.7.Su.b	Recognize that currents move the ocean water around Earth.	SE: 77, 187-188, 488 TECH: DVD ch.3, 6, 16					
SC.912.E.7.Pa.c	Recognize that humans, plants, and animals live on the Earth (biosphere).	SE: 74-75, 79, 103 TECH: DVD ch.3, 4					
SC.912.P.10.In.a	Identify examples of energy being transformed from one form to another (conserved quantity).	SE: 141-143, 516-520 TECH: DVD ch.4, 17					
SC.912.P.10.Su.b	Recognize the relationship between work and power, such as power is the amount of work a person or machine does.	SE: 516-520 TECH: DVD ch.17					
SC.912.P.10.Pa.c	Recognize the source and recipient of heat transfer.	SE: 452-453, 458-460 TECH: DVD ch.15					
SC.912.L.14.In.a	Identify that all living things are made of cells and cells function in similar ways (cell theory).	SE: 100-101 TECH: DVD ch.4					
SC.912.L.14.Su.b	Recognize that cells have different parts and each has a function.	SE: 101 TECH: DVD ch.4					
SC.912.L.14.Pa.c	Identify ways to prevent infection from bacteria and viruses, such as hand washing and first aid.	SE: 262-265 TECH: DVD ch.9,					
SC.912.L.15.In.a	Identify that prehistoric plants and animals changed over time (evolved) or became extinct.	SE: 131-132 TECH: DVD ch.5					
SC.912.L.15.Su.b	Match organisms to the animal, plant, and fungus kingdoms.	SE: 202 TECH: DVD ch.7					
SC.912.L.15.Pa.c	Recognize that animals produce offspring.	SE: 101 TECH: DVD ch.4					
SC.912.L.16.In.a	Identify that genes are sets of instructions that determine which characteristics are passed from parent to offspring.	SE: 68 TECH: DVD ch.3					
SC.912.L.16.Su.b	Recognize that all organisms have a substance called DNA with unique information.	SE: 68 TECH: DVD ch.3					
SC.912.L.16.Pa.c	Recognize that illness can result when parts of our bodies are not working properly.	SE: 256-259 TECH: DVD ch.9					
SC.912.L.17.In.a	Recognize that living things in oceans and fresh water are affected by the location, availability of light, depth of the water, and temperature.	SE: 182-191 TECH: DVD ch.6					
SC.912.L.17.Su.b	Recognize how animals and plants in an ecosystem may be affected by changes to the food supply or climate.	SE: 7-10 TECH: DVD ch.1					
SC.912.L.17.Pa.c	Recognize examples of mutual relationships between people and other living things.	SE: 5-7, 133-140 TECH: DVD ch.1, 5					