Earth Science Institute II June 28, 2010 Day 6 Correlation of EarthComm Curriculum and HSCE's

EarthComm Curriculum Unit Code			
EDG1 = Earth's Dynamic Geospheres:	ENR3 = Earth's Natural Resources:		
Chapter 1, Volcanoes	Chapter 3, Water Resources		
EDG2 = Earth's Dynamic Geospheres:	ESE1 = Earth System Evolution: Chapter		
Chapter 2, Plate Tectonics	1, Astronomy		
EDG2 = Earth's Dynamic Geospheres:	ESE2 = Earth System Evolution: Chapter		
Chapter 3, Earthquakes	2, Climate Change		
EFS1 = Earth's Fluid Spheres: Chapter 1,	ESE3 = Earth System Evolution: Chapter		
Oceans	3, Changing Life		
ENR1 = Earth's Natural Resources:			
Chapter 1, Energy Resources			

Location: Coal Power Plant- JB Sims Generating Station				
EarthCo	arthComm Connections		Energy	
	Resources, Activity 1, p. R4, Activity 2, p. R16, Activity 3		, Activity 3,	
	p. R25, Activity 4, p. R35, Activity 5, p. R43, Activity 6, p.			
	R53, Activity 7, p. R62, Activity 8, p. R72			
Learning Outcomes:		HSCE		
		principal sources of internal and external	E2.2A	
•	energy (e.g., radioac	tive decay, gravity, solar energy).		
		in the origin and use of renewable (e.g., solar,	E2.2B	
		s) and nonrenewable (e.g., fossil fuels, nuclear		
_	[U-235]) sources of 6			
		cesses in which heat transfer in the Earth	E2.2C	
	2	n, convection, and radiation.		
		and nonrenewable sources of energy for human	E2.4A	
	• `	city, fuels), compare their effects on the		
		clude overall costs and benefits.		
		act of human activities on the environment	E2.4B	
		air pollution, coral reef destruction) can be		
	_	the analysis of interactions between the four		
	Earth systems.			

Location: Cook Nuclear Plant			
EarthComm Connections	ENR1 = Earth's Natural Resources: Chapter 1,	ENR1 = Earth's Natural Resources: Chapter 1, Energy	
	Resources, Activity 1, p. R4, Activity 2, p. R16	5, Activity 3,	
	p. R25, Activity 4, p. R35, Activity 5, p. R43, A	Activity 6, p.	
	R53, Activity 7, p. R62, Activity 8, p. R72		
Learning Outcomes:		HSCE	
 Describe the Eart 	o Describe the Earth's principal sources of internal and external		
energy (e.g., radio	energy (e.g., radioactive decay, gravity, solar energy).		
 Identify difference 	o Identify differences in the origin and use of renewable (e.g., solar, E2.2B		

	wind, water, biomass) and nonrenewable (e.g., fossil fuels, nuclear [U-235]) sources of energy.	
0	Describe natural processes in which heat transfer in the Earth occurs by conduction, convection, and radiation.	E2.2C
0	Describe renewable and nonrenewable sources of energy for human consumption (electricity, fuels), compare their effects on the environment, and include overall costs and benefits.	E2.4A
0	Explain how the impact of human activities on the environment (e.g., deforestation, air pollution, coral reef destruction) can be understood through the analysis of interactions between the four Earth systems.	E2.4B

Locati	Location: Trash to Energy site in downtown GR / Landfill and burning Methane		
EarthC	rthComm Connections ENR1 = Earth's Natural Resources: Chapter 1, Energy		0.5
	Resources, Activity 1, p. R4, Activity 2, p. R16, Activity		
	p. R25, Activity 4, p. R35, Activity 5, p. R43, Activity 6,		Activity 6, p.
	R53, Activity 7, p. R62, Activity 8, p. R72		
Learning Outcomes:		HSCE	
0	Describe the Earth's	principal sources of internal and external	E2.2A
	energy (e.g., radioact	tive decay, gravity, solar energy).	
0	Identify differences i	n the origin and use of renewable (e.g., solar,	E2.2B
	wind, water, biomass	s) and nonrenewable (e.g., fossil fuels, nuclear	
	[U-235]) sources of 6	energy.	
0	Describe natural prod	cesses in which heat transfer in the Earth	E2.2C
	occurs by conduction	n, convection, and radiation.	
0	Describe renewable a	and nonrenewable sources of energy for human	E2.4A
	consumption (electric	city, fuels), compare their effects on the	
	environment, and inc	clude overall costs and benefits.	
0	Explain how the imp	act of human activities on the environment	E2.4B
		ir pollution, coral reef destruction) can be	
	understood through t	he analysis of interactions between the four	
	Earth systems.		