

# NSES cross-reference chart, grades 9-12

Content Standards	Unit 1 Where in the World?					Unit 2 The Renewable Resource						Unit 3 Using Water					Unit 4 Water for a Desert City					
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	2.6	3.1	3.2	3.3	3.4	3.5	4.1	4.2	4.3	4.4	4.5	4.6
<b>Unifying Concepts and Processes</b>																						
Systems, order, and organization	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Evidence, models, and explanation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Constancy, change, and measurement	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Evolution and equilibrium		X	X	X										X		X	X	X	X			
Form and function	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>Science as Inquiry</b>																						
Abilities necessary to do scientific inquiry		X		X	X		X	X	X	X		X		X	X		X		X	X	X	
Understanding about scientific inquiry		X		X	X		X	X	X	X		X		X	X	X	X	X	X	X	X	
<b>Earth and Space Science</b>																						
Energy in the Earth system		X	X	X	X	X	X	X	X	X	X	X	X									
Geochemical cycles	.	X	X	X	X	.	X	X	X	X	X	.	.	.	X	.	X	X	X	X	X	
Origin and evolution of the Earth system			X																			
Origin and evolution of the universe																						
<b>Physical Science</b>																						
Structure of atoms																						
Structure and properties of matter																						
Chemical reactions																						
Motions and forces																						
Conservation of energy and increase in disorder																						
Interactions of energy and matter																						
<b>Science and Technology</b>																						
Abilities of technological design		X	X	X		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	
Understandings about science and technology		.	X	X		.	.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>Science in Personal and Social Perspectives</b>																						
Personal and community health	X		X		X	X								X								
Population growth														X		X	X		X	X	X	
Natural resources	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Environmental quality	X		X		X	X			X			X		X	X							
Natural and human-induced hazards	X		X	X	X	X			X			X	X	X	X	X	X	X	X	X	X	
Science and technology in local, national, and global challenges	X	X	X	X	X	X			X			X	X	X	X	X	X	X	X	X	X	
<b>History and Nature of Science</b>																						
Science as a human endeavor	X	X	X	X	X	X	.	X	X	.	.	.	.	X	X	X	X	.	.	X	X	
Nature of scientific knowledge	.	X	X	X	.	.	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	
Historical perspectives	.	.	X	.	.	X	.	.	X	.	.	.	X	X	.	X	X	X	X	X	.	

**X = standard is directly addressed    . = underlying concept throughout unit**