

**Alignment of the Atmospheric Science Literacy Frameworks to the  
National Science Education Standards (NSES)  
GRADES 9-12**

NSES Elements/ Key Atmospheric Science Concepts	Essential Principle 7 - Interconnected				
	FC 7.1	FC 7.2	FC 7.3	FC 7.4	FC 7.5
<b>UNIFYING CONCEPTS AND PROCESSES</b>					
Systems, Order and Organization				•	
Evidence, Models, and Explanation				•	
Change, Constancy, and Measurement		•	•		
<b>EARTH AND SPACE SCIENCE</b>					
Origin and Evolution of the Earth System		•			
Geochemical Cycles		•			
<b>LIFE SCIENCE</b>					
Interdependence of Organisms		•	•		
Matter, Energy and Organization in Living Systems		•			
The Cell	•				
<b>PHYSICAL SCIENCE</b>					
Chemical Reactions	•	•			
<b>HISTORY AND NATURE OF SCIENCE</b>					
Nature of Scientific Knowledge 5-12				•	
Historical Perspectives			•		
<b>PERSONAL AND SOCIAL PERSPECTIVES</b>					
Natural Resources	•	•	•		
Environmental Quality		•			
Natural and Human-Induced Hazards		•	•		•
Science and Technology in Local, National & Global Challenges		•			•
<b>SCIENCE AND TECHNOLOGY</b>					
Understanding About Science & Technology K-12		•		•	