

BSCS Science: An Inquiry Approach Framework for Grades 9-11

Units	Major Concepts Addressed at Each Grade Level		
	9	10	11
Science As Inquiry	Abilities necessary to do and understandings about scientific inquiry with a focus on:		
	<ul style="list-style-type: none"> ▪ Questions and concepts that guide scientific investigations 	<ul style="list-style-type: none"> ▪ Design of scientific investigations ▪ Communicating scientific results 	<ul style="list-style-type: none"> ▪ Evidence as the basis for explanations and models ▪ Alternative explanations and models
Physical Science	<ul style="list-style-type: none"> ▪ Structure and properties of matter ▪ Structure of atoms ▪ Integrating chapter 	<ul style="list-style-type: none"> ▪ Motions and forces ▪ Chemical reactions ▪ Integrating chapter 	<ul style="list-style-type: none"> ▪ Interactions of energy and matter ▪ Conservation of energy and increase in disorder ▪ Integrating chapter
Life Science	<ul style="list-style-type: none"> ▪ Cell structure and function ▪ Behavior of organisms ▪ Integrating chapter 	<ul style="list-style-type: none"> ▪ Biological evolution ▪ Molecular basis of heredity ▪ Integrating chapter 	<ul style="list-style-type: none"> ▪ Matter, energy, and organization in living systems ▪ Interdependence of organisms ▪ Integrating chapter
Earth-Space Science	<ul style="list-style-type: none"> ▪ Origin and evolution of the universe ▪ Origin and evolution of the Earth system ▪ Integrating chapter 	<ul style="list-style-type: none"> ▪ Geochemical cycles ▪ Integrating chapter 	<ul style="list-style-type: none"> ▪ Energy in the Earth system ▪ Integrating chapter
Science in a Personal and Social Perspective; Science & Technology	<ul style="list-style-type: none"> ▪ Personal and community health ▪ Natural and human-induced hazards ▪ Abilities of technological design 	<ul style="list-style-type: none"> ▪ Population growth ▪ Natural resources ▪ Environmental quality 	<ul style="list-style-type: none"> ▪ Science and technology in local, national, and global challenges ▪ Understandings about science and technology
History and Nature of Science addressed throughout grade levels and units ▪ Science as a human endeavor ▪ Nature of science ▪ History of science			