



Course Name: 7th Grade Honors
Science School Year: 2021 - 2022

Course Purpose and Relevance:

Grade 7 science is interdisciplinary in nature; however, much of the content focus is on organisms and the environment. National standards in science are organized as [a] multi-grade blocks such as Grades 5-8 rather than individual grade levels. In order to follow the grade level format used in Texas, the various national standards are found among Grades 6, 7, and 8. Recurring themes are pervasive in sciences, mathematics, and technology. These ideas transcend include change and constancy, patterns, cycles, systems, models, and scale. The Pre AP course is an accelerated study of 7th grade and some 8th grade standards.

Overview of Student Outcomes:

- The student, for at least 40% of instructional time, conducts laboratory and field investigations following safety procedures and environmentally appropriate and ethical practices
- The student uses scientific practices during laboratory and field investigations.
- The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists.
- The student knows how to use a variety of tools and safety equipment to conduct science inquiry.
- The student knows that interactions occur between matter and energy.
- The student knows that matter has physical and chemical properties and can undergo physical and chemical changes.
- The student knows that there is a relationship among force, motion, and energy.
- The student knows that natural events and human activity can impact Earth systems.
- The student knows components of our solar system.
- The student knows that there is a relationship between organisms and the environment.
- The student knows that populations and species demonstrate variation and inherit many of their unique traits through gradual processes over many generations.
- The student knows that living systems at all levels of organization demonstrate the complementary nature of structure and function.
- The student knows that a living organism must be able to maintain balance in stable internal conditions in response to external and internal stimuli.
- The student knows that reproduction is a characteristic of living organisms and that the instructions for traits are governed in the genetic material.
- The student knows that matter is composed of atoms and has chemical and physical properties.
- The student knows characteristics of the universe.
- The student knows that natural events can impact Earth systems.
- The student knows that climatic interactions exist among Earth, ocean, and weather systems

Available Support for Student Learning:

Refer to the teacher's Course Syllabus for resources and course specific opportunities.
Student textbook and/or digital version are available through the CCISD Student Portal.

Link to Course TEKS on State website:

<http://ritter.tea.state.tx.us/rules/tac/chapter112/ch112c.html#112.33>

Year-At-A-Glance 2021-2022	Department	Science	PEIMS Code	
	Subject Area	7 th Grade Honors Science	Grade Level	7 th

Area	1 st Nine Weeks	2 nd Nine Weeks
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	August	September	October	November	December
Week 1		Cells and Level of Organ Life & Cell Theory Organelles and Functions Levels of Organ.	Human Body System 10 body systems End of 1 st 9 Weeks	Human Body System 10 body systems	Review
Week 2		Energy Transformations Sun to the Cell	Human Body System 10 body systems	Heredity Heredity, Genes & Chromosomes Sexual/Asexual Repro.	<u>14</u> Semester Exams
Week 3	Safety and Scientific Skills Safety Reasoning Skills Data	Plants Plant Structure Forces and Ext Stim Forces and Int Stim	Human Body System 10 body systems	Chemistry Chemical Formulas ID Balanced Equations Conservation of Mass	<u>21</u> Winter Holidays
Week 4	Safety and Scientific Skills Safety Reasoning Skills Data	Plants Plant Structure Forces and Ext Stim Forces and Int Stim	Human Body System 10 body systems	Thanksgiving Break	Winter Holidays
Week 5	Cells and Level of Organ Life & Cell Theory Organelles and Functions Levels of Organ.			Chemistry Chemical Formulas ID Balanced Equations Conservation of Mass	

Week is based on the month that the first day of the week occurs.

Year-At-A-Glance	Department	Science	PEIMS Code	03060800
	Subject Area	7th Grade Honors Science	Grade Level	9-12

3rd Nine Weeks	4th Nine Weeks
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	January	February	March	April	May
Week 1	Semester Exam Analysis Ground & Surface Water Ground & Surface Water	WED and Topo/Sat Maps WED Topographic Maps Satellite Views	Succession and Dich. Keys Succession Dichotomous Keys	Natural Selection & Diversity Biodiversity & Change Natural Selection & Darwin Selective Breeding	Space Earth's Rotation Day/Night Earth's Revolution Seasons Lunar Cycles & Tides Comp of the Univ/Solar Sys.
Week 2	Ground & Surface Water Ground & Surface Water	Weather Effects of Convection Ocean and Wind Currents Meteorology Catastrophic Events	End of 3 rd 9 Weeks	Natural Selection & Diversity Biodiversity & Change Natural Selection & Darwin Selective Breeding	Space Earth's Rotation Day/Night Earth's Revolution Seasons Lunar Cycles & Tides Comp of the Univ/Solar Sys.
Week 3	Ground & Surface Water Ground & Surface Water	Weather Effects of Convection Ocean and Wind Currents Meteorology Catastrophic Events	Spring Break	Space Earth's Rotation Day/Night Earth's Revolution Seasons Lunar Cycles & Tides Comp of the Univ/Solar Sys.	Review
Week 4	WED and Topo/Sat Maps WED Topographic Maps Satellite Views	Weather Effects of Convection Ocean and Wind Currents Meteorology Catastrophic Events	Ecology Flow of Energy Biomes & Microhabitats Relationships	Space Earth's Rotation Day/Night Earth's Revolution Seasons Lunar Cycles & Tides Comp of the Univ/Solar Sys.	Semester Exams
Week 5			Ecology Flow of Energy Biomes & Microhabitats Relationships		