



Course Name: Environmental Systems**School Year: 2021 - 2022****Course Purpose and Relevance:**

In Environmental Systems, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include: biotic and abiotic factors in habitats, ecosystems and biomes, interrelationships among resources and an environmental system, sources and flow of energy through an environmental system, relationship between carrying capacity and changes in populations and ecosystems, and changes in environments.

- The student uses scientific methods during laboratory and field investigations.
- The student, for at least 40% of instructional time, conducts hands-on laboratory and field investigations using safe, environmentally appropriate, and ethical practices.
- The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom.
- The student knows the relationships of biotic and abiotic factors within habitats, ecosystems, and biomes.
- The student knows the interrelationships among the resources within the local environmental system.
- The student knows the sources and flow of energy through an environmental system.
- The student knows the relationship between carrying capacity and changes in populations and ecosystems.
- The student knows that environments change naturally.
- The student knows the impact of human activities on the environment.

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#112.37>

Year-At-A-Glance 2021-2022	Department	Science	PEIMS Code		Credit	1 state
	Course Title	Environmental Systems			Course Length	1 year
	Prerequisites	Biology and Chemistry			Grade Level(s)	11 - 12

Week	1 st Nine Weeks			2 nd Nine Weeks		3 rd Nine Weeks			4 th Nine Weeks	
	August	September	October	November	December	January	February	March	April	May
1		Terrestrial Ecosystems	Aquatic Ecosystems	Population dynamics	Solid Earth Review	Energy and Natural Resources	Agriculture and Soil	Review End of 9 weeks	Atmosphere & Air Pollution	Pollution & Waste Management (STAAR)
2		Terrestrial Ecosystems	Aquatic Ecosystems	Population dynamics	Finals	Energy and Natural Resources	Pesticides & Toxicology	Spring Break	Atmosphere and Air Pollution	Enrichment
3	Field Techniques and Safety	Terrestrial Ecosystems	End of 9 wks Aquatic Ecosystems	Population dynamics	Holidays	Energy and Natural Resources	Pesticides & Toxicology	Atmosphere and Air Pollution	Pollution & Waste Management	Review
4	Field Techniques and Safety	Terrestrial Ecosystems	Aquatic Ecosystems	Thanks-giving	Holidays	Agriculture and Soil	Pesticides & Toxicology	Atmosphere and Air Pollution	Pollution & Waste Management	Finals
5	Terrestrial Ecosystems		Aquatic Ecosystems	Solid Earth		Agriculture and Soil			Pollution & Waste Management	