



Course Name: Astronomy

School Year: 2021-2022

Course Purpose and Relevance:

In Astronomy, students conduct laboratory and field investigations, use scientific methods, and make informed decisions using critical thinking and scientific problem solving. Students study the following topics: astronomy in civilization, patterns and objects in the sky, our place in space, the moon, reasons for the seasons, planets, the sun, stars, galaxies, cosmology, and space exploration. Students who successfully complete Astronomy will acquire knowledge within a conceptual framework, conduct observations of the sky, work collaboratively, and develop critical-thinking skills.

Overview of Student Outcomes:

- The student, for at least 40% of instructional time, conducts laboratory and field investigations using safe, environmentally appropriate, and ethical practices.
- The student uses scientific methods during laboratory and field investigations.
- The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom.
- The student recognizes the importance and uses of astronomy in civilization.
- The student develops a familiarity with the sky.
- The student knows our place in space.
- The student knows the role of the Moon in the Sun, Earth, and Moon system.
- The student knows the reasons for the seasons.
- The student knows that planets of different size, composition, and surface features orbit around the Sun.
- The student knows the role of the Sun as the star in our solar system
- The student knows the characteristics and life cycle of stars.
- The student knows the variety and properties of galaxies.
- The student knows the scientific theories of cosmology.
- The student recognizes the benefits and challenges of space exploration to the study of the universe.

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	Department	Science	PEIMS Code	
	Subject Area	Astronomy	Grade Level	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		History of Astronomy	Earth and Moon	The Sun	Project	Solar System – Inner Planets	Solar System – Outer Planets	Stars and Constellations	Galaxies and Universe	Space Exploration And Rockets
2		Earth	Earth and Moon End of 9 wks.	Seasons and Eclipses	Review	Solar System – Inner Planets	Solar System – Outer Planets AND Other Objects	Spring Break	Galaxies and Universe	Space Exploration and Rockets
3	Measurement and Navigation	Earth and Moon	Earth and Moon	Seasons and Eclipses	Final Exams	Solar System – Inner Planets	Solar System – Other Objects	Stars and Constellations	Galaxies and Universe	Space Exploration and Rockets and Review
4	Measurement and Navigation	Earth and Moon	The Sun	Thanks-giving	Holiday	Solar System – Outer Planets	Solar System – Other Objects	Stars and Constellations	Space Exploration And Rocket	Finals
5	History of Astronomy				Holiday	Solar System Outer Planets				