

## Astronomy - Course Syllabus (.5 Credit)

## **Description:**

This introductory Astronomy course offers the student an opportunity to explore the basics of celestial bodies and phenomena, such as planets, moons, stars, nebulae, galaxies, and comets. This course includes career exploration in Astronomy, in addition to presenting current day topics in this quickly changing field. Additional enhancement topics covered are: Space Travel, The Hubble Telescope, The International Space Station, Wormholes, Dark Matter, and Special Relativity.

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## **Course objectives:**

Throughout the course, you will meet the following goals:

- Describe the basic principles of astronomy, and the solar system's role in astronomy.
- Explain the basic astronomy concepts in relation to the sun, and the important role the sun has in the solar system.
- Describe the basic principles of astronomy in relation to the galaxy.
- Explore and explain the tools that are used by astronomers.
- Describe various astronomical phenomena, such as supernovas, quasars, pulsars, black holes, and wormholes.
- Apply astronomy concepts to explain the theories of time travel.

## **Contents**:

- Module 1: Astronomy Basics
- Module 2: Planets in the Solar System
- Module 3: Neptune, Pluto, and Comets
- Module 4: Tools of Astronomers and The Milky Way Galaxy
- Module 5: Formation of The Milky Way and Stars
- Module 6: Astronomical Phenomena
- Module 7: Cosmology
- Module 8: Advanced Topics in Astronomy
- Module 9: Einstein's Contributions to Astronomy

Grading Scale	Grade Weighting
A = 90-100%	Quizzes 70%
B = 80-89%	<u>Final Exam 30%</u>
C = 70-79%	100%
D = 60-69%	
F = under 59%	