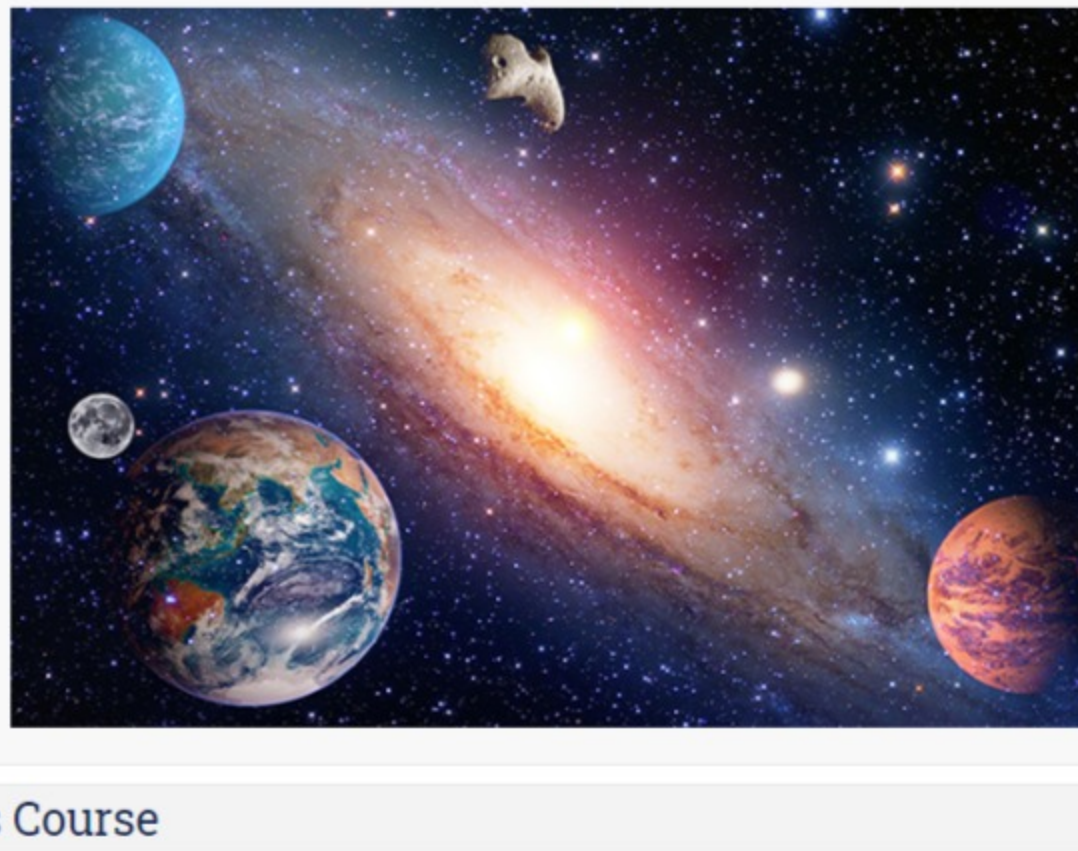


Astronomy, Part 1



How to Take This Course

Complete all the quizzes and the assignment in each unit. Once the quizzes for a unit are complete, you will have access to the unit test. We recommend you complete the unit assignment before you attempt the unit test, the assignment will help you prepare. You will have access to the final when all unit tests are complete and your assignments are graded.

Allow 2-3 days for an assignment to be graded. Read the full course instructions to understand the course grading.

[Instructions for the course](#)

[How This Course Works and Suggested Timeline](#)

[Submitting Your Assignments](#)

[MANDATORY QUIZ - You have to take this quiz before you begin the course!](#)

[Ask The Teacher](#)

Meet your teacher for this course and ask a question.

If you need help with this course we offer online tutoring. You can find more details about our tutoring services [here](#).

Unit 1. The Science of Astronomy

In this unit we will learn:

- What Astronomy is, its ancient beginnings, and a brief history of Astronomy.
- To make some naked eye observations.

[1.1 What is Astronomy?](#)

[1.1 Quiz](#)

[1.2 Ancient Roots of Astronomy](#)

[1.2 Quiz](#)

[1.3 The History of Astronomy](#)

[1.3 Quiz](#)

[1.4 Naked Eye Observations](#)

[1.4 Quiz](#)

[Unit 1 Assignment: Observing the Night Sky Practical](#)

Unit 2. Tools of Astronomy

In this unit we will learn:

- The varying types of Astronomy and the different tools used in the science.
- The history of the telescope, how they work, and how they have developed over time.
- The practice of radio Astronomy.

[2.1 History of the Telescope](#)

[2.1 Quiz](#)

[2.2 Reflecting Telescopes](#)

[2.2 Quiz](#)

[2.3 Refracting Telescopes](#)

[2.3 Quiz](#)

[2.4 Radio and Other Telescopes](#)

[2.4 Quiz](#)

[2.5 Space-Based Telescopes](#)

[2.5 Quiz](#)

[2.6 Spectroscopy and Spectroscopes](#)

[2.6 Quiz](#)

[Unit 2 Assignment: Telescope Lab](#)

Unit 3. Space Exploration

In this unit we will learn:

- A brief overview of the history of space exploration, including Voyage 1.
- The potential future of human space exploration, and the challenges of interstellar travel.

[3.1 A Brief History of Space Exploration](#)

[3.1 Quiz](#)

[3.2 The First Man in Space](#)

[3.2 Quiz](#)

[3.3 The Apollo Missions](#)

[3.3 Quiz](#)

[3.4 Voyager 1](#)

[3.4 Quiz](#)

[3.5 The International Space Station](#)

[3.5 Quiz](#)

[3.6 Private Companies and NGOs](#)

[3.6 Quiz](#)

[3.7 The Future of Human Space Exploration](#)

[3.7 Quiz](#)

[3.8 The Challenges of Interstellar Travel](#)

[3.8 Quiz](#)

[Unit 3 Assignment: Planning an ISS Experiment](#)

Unit 4. Introduction to the Solar System

In this unit we will learn:

- About our Solar System, including its formation.
- How the earth orbits the Sun, and the path it takes.
- About dwarf planets and the Pluto dilemma.
- About the asteroid belt, comets, and the Oort cloud.
- The differences in sizes of celestial bodies.

[4.1 Formation of the Solar System](#)

[4.1 Quiz](#)

[4.2 How the Earth Orbits the Sun](#)

[4.2 Quiz](#)

[4.3 Dwarf Planets and The Pluto Dilemma](#)

[4.3 Quiz](#)

[4.4 The Asteroid Belt](#)

[4.4 Quiz](#)

[4.5 Comets and the Oort Cloud](#)

[4.5 Quiz](#)

[4.6 Size Comparisons of Celestial Bodies](#)

[4.6 Quiz](#)

[Unit 4 Assignment: Planetary Orbit Simulator Online Lab](#)

Unit 5. Solar System: The Planets

In this unit we will learn:

- About the solar system and the planets, including Mercury, Venus, Earth and the Moon, Mars, Jupiter, Saturn, Uranus, and Neptune.

[5.1 Mercury](#)

[5.1 Quiz](#)

[5.2 Venus](#)

[5.2 Quiz](#)

[5.3 Earth and Moon](#)

[5.3 Quiz](#)

[5.4 Mars](#)

[5.4 Quiz](#)

[5.5 Jupiter](#)

[5.5 Quiz](#)

[5.6 Saturn](#)

[5.6 Quiz](#)

[5.7 Uranus](#)

[5.7 Quiz](#)

[5.8 Neptune](#)

[5.8 Quiz](#)

[Unit 5 Assignment: Searching for Asteroids Citizen Science Lab](#)

Unit 6. The Stars as Seen From Earth

In this unit we will learn:

- To view the stars from the perspective of Earth, and how to interpret star charts.
- The celestial coordinate systems and stellar magnitudes.
- To measure distances to stars.
- About the Messier catalog.

[6.1 Star Charts](#)

[6.1 Quiz](#)

[6.2 Celestial Coordinate Systems](#)

[6.2 Quiz](#)

[6.3 Stellar Magnitudes](#)

[6.3 Quiz](#)

[6.4 Measuring Distances to Stars](#)

[6.4 Quiz](#)

[6.5 Messier Catalog](#)

[6.5 Quiz](#)

[6.6 Star Clusters](#)

[6.6 Quiz](#)

[Unit 6 Assignment: Parallax Lab](#)

Final Exam

Complete all the assignments and unit tests in this course. Once they are complete and the assignments have been graded, the Final will be made available and appear below the Practice Final.

Warning: You have only ONE attempt at the Final. There is a 3 hour time limit.

Are you ready to take the Final? We highly recommend you take the Practice Final first and if you are weak in any area, review the relevant course material again. You have unlimited attempts at the practice final; it will help you to prepare.

Good Luck!!

[Practice Final](#)

Course Completion

The "Certificate" and "Course Completion Record Request" links below are not active, they cannot be accessed until you have taken the final. Upon satisfying this requirement the links will become active and you can use them.

Before you go, we would appreciate your opinion on the course, please take 1 minute to complete the feedback form.

We hope you enjoyed this course!

[Course Feedback](#)

Thank you for taking this course! Let us know what you think about it.

[Request a Course Completion Record](#)

If you need SVHS to send proof of your course completion directly to your school complete this form.

Not available unless: The activity **Final Exam** is marked complete

[Certificate of Completion](#)

Not available unless: The activity **Final Exam** is marked complete