

# 2026 Novice Astronomy Class Syllabus

January 2

Solar System Series: Mars

- Planet formation
- Planet by the numbers
- Surface features
- Atmosphere
- Natural satellites
- Exploration
- Observing opportunities

Hands on: Water as a universal solvent and a necessary ingredient for life.

February 6

Aliens: Is Anyone Out There?

- Historical Background
- Fermi Paradox
- Drake Equation
- Search for Extraterrestrial Intelligence (SETI)
- Goldilocks Zone
- Icy Moons
- Extrasolar Atmospheres

Hands-on: ET phone home: Is anyone out there?

March 6

Solar System Series: The Asteroid Belt

- Formation
- Significant Numbers
- Characteristics
- Exploration
- Observing opportunities

Hands on: Hands-on: Seasons

April 3

How Far is Far? Astronomical Measurement Systems

- Everyday Experience
- An Order of Magnitude
- Cosmic Speed Limit
- Light Second
- Light Year
- Distance Ladder

Hands on: Sky Quality: Transparency & Seeing.

May 1

Solar System Series: Jupiter

- Planet formation
- Planet by the numbers
- Surface features
- Atmosphere
- Natural satellites
- Exploration
- Observing opportunities

Hands on: Extra Bright Star Name Deed - Don't waste your money!

June 5

Citizen Science

- What is Citizen Science?
- How to Get Involved?
- Programs

Hands on: Orbits

September 4

Solar System Series: Saturn

- Planet formation
- Planet by the numbers
- Surface features
- Atmosphere
- Natural satellites
- Exploration
- Observing opportunities

Hands on: Gravitational Assist

October 2

The Electromagnetic Spectrum

- Light
- Visible Wavelengths
- Invisible Wavelengths
- Combining Wavelengths

Hands on: Measuring the temperature of light.

November 6

Solar System Series: The Ice Giants

- Planet formation
- Planet by the numbers
- Surface features
- Atmosphere
- Natural satellites
- Exploration
- Observing opportunities

Hands on: Expansion of the Universe.

December 4

## Exoplanets

- What is an Exoplanet?
- Early History
- Space Telescopes
- Types of Exoplanets
- Discovery Methods
- Habitability

Hands on: Inclination and detection of extrasolar planets.