



## Community Education – Winter Quarter 2026

**Course Title:** Stargazing 101

**Instructor:** Prof. Kyle Dittmer

**Email:** kdittmer@clark.edu

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### Course Details

- Item # 45007
  - Fee \$125.00
  - Ridgefield/Boschma Farms facility (7000 Pioneer Street), in-person, Room # 208
  - Monday afternoons, February 2, 9 (skip 16), 23, and March 2, 9; 1:30pm to 3:30pm
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### Course Description

Do you want to rekindle your childhood fascination with the starry night sky? Learn how to navigate the night sky – cosmic parade of seasonal stars and constellations, planets, the Moon, comets, and meteor showers with star-maps, binoculars, and a telescope. Understand how and why the stars and planets move the way they do. Other topics: the Sun, stars, galaxies, extraterrestrial Life, and the Universe. Taught by an enthusiastic life-long amateur astronomer.

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### Learning Outcomes

By the end of this course, students will:

- Explain the motions of astronomical objects visible in the night sky, along with the phases of the Moon and Venus plus Solar eclipses, in terms of solar system models and physical laws of motion
  - Understand how the Solar System formed and its objects (e.g., planets, asteroids, comets)
  - Learn how to visually discern planets from stars; Learn how to use a star-map and apps
  - Determine the properties of stars and galaxies, calculate the distances to astronomical objects
  - Describe the basis for current models of the origin, structure, and evolution of the Universe
  - Understand the mechanics and types of telescopes, how to use a telescope, and shopping criteria
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# Course Schedule

## Week 1

Introduction: Branches of Astronomy; Methods to view the Night Sky, Cycles of Moon and Sun, Eclipses of the Sun and Moon. History of Astronomy: Ancient Times to Modern Era. Star Hopping exercise.

## Week 2

Instruments of Astronomy: Radiation, Light Waves; Telescopes (and how to use) – Optical, Radio, UV. The Sun: Solar Science, Sun’s Atmosphere and Structure, Solar Activity and Sunspots. Telescope exercise.

## Week 3

Solar System. The Planets: Terrestrial (inner) and Outer; Origin of the Solar System, Earth; Asteroids, Comets, Meteors, the Kuiper Belt and Oort Cloud. Solar System scaling exercise.

## Week 4

Stars – Stellar Astronomy: Star Distance and Luminosity, Classification and Structure; Star Birth-to-Death.

## Week 5

Galaxies: Milky Way Galaxy, Galactic Properties and Structure; Galactic Classification and Evolution. Cosmology: “Big Bang” Theory, Structure of the Universe, Dark Matter/Energy. Life beyond Earth.

An optional night-time stargazing gathering will be offered in Ridgefield, weather permitting, to help reinforce concepts learned in class.



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## Resources

Recommended references for further study:

- Astro3 textbook, <https://www.amazon.com/Online-Printed-Access-Engaging-Titles/dp/1337097500>

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## Class Evaluation

- Class evaluations are sent by email.
- If you don’t see it right away, check your **junk/spam folder**.
- Evaluations are **anonymous** and come directly from Clark College.
- If you don’t receive one, contact:

- Email: [continuingeducation@clark.edu](mailto:continuingeducation@clark.edu)
  - Phone: 360-992-2939
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## Incident Weather

- If the college closes due to weather, updates will appear at [www.clark.edu](http://www.clark.edu)
  - Community Education may also cancel classes independently if travel is unsafe.
  - If canceled, you will be notified by both phone and email.
  - Please check that your contact information is correct on the class roster.
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## More Classes

Looking for more Community Education courses? Visit: [www.clark.edu/cce/](http://www.clark.edu/cce/)