

OLLI COURSE 2023

“When Day Turns to Night: America’s Upcoming Solar Eclipses”

Wednesdays, 9:30 a.m. – 11:00 a.m. starting September 6 (4 weeks)

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Outline:

Week #1: The Sun-Earth-Moon System

- The current sky
- The Earth/Moon system – a model
- Moon Phases
- Rise/set times
- The Ecliptic
- Motions of the Moon
- Lunar calendars
- Can the Moon affect you?

Week #2: Solar & Lunar Eclipses

- More current sky
- Moon’s orbit
 - Apogee/Perigee
 - “Supermoons
- What causes an eclipse? Eclipse geometry.
- Types of eclipses
- Why so rare?
- Saros cycle
- Folklore
- Moon moving farther away
- Unique to Earth? Eclipses on other planets in solar system
- Extra solar planets – transit method & light curves

Week #3: Looking back at past eclipse

- Historical eclipses
- 1994 annular eclipse
- 2015 total lunar eclipse
- 2017 Total Solar Eclipse

Week #4: What to Expect this Fall and in 2024

- Eclipse tracks – where to go to be in totality
- Where to observe
- Visibility in CU
- What to look for when observing the eclipse
- Safely observing eclipses
- Eclipse photography

