Night Sky Viewing at Widener University

October 2025

Sunrise & Sunset Times (EDT)

	Sunrise	Sunset
Begin Month	6:58 am	6:43 pm
End Month	7:29 am	6:00 pm

Lunar Phases

Full
6th
"Harvest Moon"

Last Quarter
13th

New
21st

First Quarter
29th

Naked-Eye Planets in the Evening & Morning Sky this Month

Mercury (*in Virgo-Libra*): Mercury has a relatively poor apparition in the evening sky this October, hovering low above the western horizon and never quite emerging from the twilight glow. Mercury sets only about ½ hour after the Sun on the 1st, and just an hour after sunset when it reaches greatest eastern (evening) elongation on the 29th.

Mars (*in Virgo-Libra*): Mars resembles an orange star very low in the west during evening twilight; it sets roughly one hour after sunset all month, which is 7:45 pm EDT on the 1st, and 6:45 pm on the 31st. Mars is currently located on the far side of the Sun, over 220 million miles away, and in just 3 months it will pass behind the Sun (conjunction). Mars will reappear at dawn in late winter 2026.

Saturn (*in Aquarius*): Saturn was at its finest back on September 20th, when it was in opposition with the Sun, but it remains in favorable position for viewing through October. Saturn resembles a bright, cream-colored star located in Aquarius near the border with Pisces; it ascends in the southeast at dusk and remains viewable until the wee hours of the morning. Saturn stands due south, above the whitish star Fomalhaut, at around 11 pm EDT in mid-October; it sets in the west at 6 am as October begins and just before 4 am at month's end. A telescope reveals Saturn's ring system (still oriented nearly edge-on, but beginning to tilt more toward Earth), its largest moon Titan, and, as a bonus, the faint, bluish-green world Neptune just over two degrees to Saturn's east (left).

Venus (*in Leo-Virgo*): Venus beams with a yellowish-white brilliance in the east-northeast during the pre-dawn hours. It rises a few minutes before 5 am in early October, and at 6 am, which is only 1½ hours before sunrise, on the 31st. In the closing days of 2025, Venus will vanish into the morning twilight and slowly reappear in the evening sky during early 2026.

Jupiter (*in Gemini*): Jupiter mimics a majestic golden star within the bright constellation Gemini, which is up in the east-northeast during the late night hours. On October 1st, Jupiter peeks above the horizon shortly after 12:30 am EDT, and around 10:45 pm on Halloween Night. Jupiter far outshines the nearby stars, including Gemini's Pollux and Castor, which hang above it. At dawn, Jupiter stands high in the east well above the even more brilliant Venus. Jupiter's best showing is still 3 months away, when it reaches opposition with the Sun on January 10th.

Orionid Meteor Shower: Peaks in wee hours of October 21st. Its source: minute particles from Halley's Comet. Happily, the Moon's new phase on that date will guarantee a dark sky for viewing the fainter meteors.

Constellations & Bright Stars Visible Around 9 pm EDT in October

Lyra– just W of overhead
Bright blue-white star *Vega*

Aquila– moderately high in SW
Bright white star *Altair*

Cygnus – nearly overhead
Bright star *Deneb*
Vega, Altair, & Deneb* form the ***Summer Triangle*

Sagittarius – low in SW, setting
"Tea Pot" asterism

Pisces Austrinus – low in SE, getting higher
Bright white star *Fomalhaut*

Cetus – very low in ESE, rising
Bright orange stars *Diphda, Menkar*

Pegasus (Great Square) – high in ESE
Bright stars *Scheat, Markab, Algenib*

Andromeda – high in E, to left (E) of Pegasus
Bright stars *Alpheratz* (NE corner of Great Square), *Mirach, Almach*

Aquarius – midway up in S
Planet *Saturn*

Pisces – getting higher in E

Aries – low in ENE, rising
Bright stars *Hamal*, *Sheratan*

Cassiopeia – "W" high in NNE
Bright stars *Shedar, Caph, Ruchbah*

Perseus – rising in NE, to lower right of Cassiopeia
Bright stars *Mirfak* and *Algol*

Auriga –low in NNE, rising
Bright star *Capella*

For more information on the night sky, visit the Widener Observatory Stargazing website at www.widener.edu/stargazing/. A set of free sky maps can be obtained at www.skymaps.com/.