# Night Sky Viewing at Widener University September 2025

#### Sunrise & Sunset Times (EDT)

	Sunrise	Sunset
Begin Month	6:30 am	7:32 pm
End Month	6:57 am	6:45 pm

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

*Mars* (*in Virgo*): Eight months after its most recent close approach to Earth back in January, Mars is now located on the far side of the Sun, over 200 million miles away, and has faded considerably. As September opens, Mars lies within Virgo, an orange spark to the west (right) of Virgo's brightest star Spica. Mars continues its eastward glide through Virgo this month, eventually passing just above bluish-white Spica on the 13<sup>th</sup>, providing a lovely, color-contrasting duo. During September, Mars sets around 9 pm EDT on the 1s<sup>tt</sup>, which is 1½ hours after sunset, and just before 8 pm, or only about one hour before sunset, on the 30<sup>th</sup>.

Saturn (in Pisces): Cream-colored Saturn beams from within the faint constellation of Pisces, which is low in the east at nightfall. Saturn reaches opposition with the Sun on the night of September 20<sup>th</sup>, when it is closest to Earth and at peak brightness, outshining autumn's first-magnitude jewel Fomalhaut, which lies to its lower right in late evening. Saturn is visible all night this month, rising at sundown, standing due south around 1 am, and setting at sunrise. A small telescope (or high-power binoculars) will reveal Saturn's amazing ring system (now beginning to open up after having been oriented edge-on for much of 2025), 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 Cancer-Leo): Venus gleams like a yellow jewel in the predawn sky. Venus rises in the east-northeast shortly before 4 am, or  $2\frac{1}{2}$  hours before the Sun, in early September, and around 5 am, or just two hours before sunrise, at month's end. On the morning of the  $19^{th}$ , Venus, the star Regulus, and the thin, waning crescent Moon will form a tight trio low in the eastern sky, best visible about an hour before sunrise.

Jupiter (in Gemini): Jupiter is well-placed for viewing in the wee hours of the morning this September. Jupiter resembles a majestic golden star within the constellation Gemini, which is up in the east-northeast during the hours before daybreak. On September 1<sup>st</sup>, Jupiter peeks above the horizon shortly after 2 am EDT, and around 12:30 am on the 30<sup>th</sup>. Jupiter far outshines the nearby stars, including Gemini's Pollux and Castor. At dawn, Jupiter up in the east well above the even more brilliant Venus.

*Mercury* (*in Leo-Virgo*): As September opens, Mercury, paired with Leo's brightest star Regulus, is rising just one hour before sunrise, but within a week it vanishes into the dawn glow. Mercury passes behind the Sun (superior conjunction) on the 13<sup>th</sup>, then swings into the evening sky.

*Earth*: reaches the *Autumnal Equinox* on September 22<sup>th</sup> at 2:19 pm EDT. Summer ends and autumn begins in the northern hemisphere.

### **Lunar Phases**









**7**<sup>th</sup> "Corn Moon"

Last Quarter 14<sup>th</sup>

New 21<sup>st</sup>

First Quarter 29<sup>th</sup>

## Constellations & Bright Stars Visible Around 9 pm EDT in September

*Ursa Major* – low above NNW horizon
Asterism *Big Dipper*, w/ pointer stars *Merak, Dubhe;* handle stars *Alioth, Mizar (& Alcor), Alkaid* 

*Ursa Minor* –up in NNW, to left of North Star Asterism *Little Dipper*, contains *Polaris* (North Star)

**Boötes** – getting low in WSW Bright star *Arcturus* 

Corona Borealis – halfway up in W, above Boötes Bright star Gemma (also called Alphecca)

*Hercules* – high in W, between Lyra & Corona Borealis "Keystone" pattern of 4 stars, star cluster M13

Scorpius – getting low in SW Bright star Antares; stars Shaula and Lesath form "Cat's Eyes" in Scorpion's tail;

*Ophiuchus* – halfway up in SW, above *Scorpius* Bright star *Rasalhague* 

Sagittarius – low in S Asterism the "Tea Pot"

*Lyra* – overhead Bright star *Vega* 

Aquila – high up in S, below Vega Bright star Altair

Cygnus – high in E, east of Lyra
Bright star Deneb, forms Summer Triangle with
Altair & Deneb

**Pegasus (including the Great Square)** – rising in E

*Cassiopeia* – rising in NE Easily recognizable "W" shape

**Perseus** – rising in NE, below Cassiopeia Bright stars *Mirfak* and *Algo* 

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