

Night Sky Viewing at Widener University

July 2025

Sunrise & Sunset Times (EDT)

	Sunrise	Sunset
Begin Month	5:37 am	8:34 pm
End Month	6:00 am	8:16 pm

Lunar Phases



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

Mercury (*in Cancer*): As July opens, Mercury can be spotted at dusk, mimicking a bright star hovering very low above the western horizon; it sets a few minutes after 10 pm EDT, or 1½ hours after sunset. Mercury reaches its greatest evening elongation with the Sun on July 4th, after which it begins its slow descent toward the Sun, eventually vanishing into the evening twilight toward the end of the month. Mercury passes between the Earth and the Sun (inferior conjunction) on the 31st.

Mars (*in Leo-Virgo*): Orangish Mars continues to fade as it drifts eastward through the constellation Leo, pulling away from Leo's lucida, bluish-white Regulus, which it paired up with back in mid-June. At that time, the two were of nearly equal brightness (though of contrasting colors), but now Mars is distinctly the fainter of the two. During July, Mars sets by 11:30 pm on the 1st and around 10:15 pm on the 31st.

Venus (*in Taurus*): Venus continues its dominance among both stars and planets, shining like a majestic yellow star in the east-northeast during the pre-dawn hours. Venus rises around 3 am, or nearly three hours before the Sun, for most of July. Back on May 31st, Venus was at greatest morning elongation with the Sun, but the ecliptic plane was then unfavorably orientated to the eastern horizon at dawn; the orientation has improved since then, so that Venus hovers a bit higher above the horizon in the early morning hours than it did over a month ago.

Saturn (*in Pisces*): Saturn, resembling a bright, cream-colored star, enters the late evening sky this month, although it remains well-placed for early morning viewing as well. On July 1st, Saturn rises in the east after midnight, around 12:30 am, but by the 31st, Saturn will be rising a full 2 hours sooner, at 10:30 pm, and it passes due south at 4:30 am.

Jupiter (*in Gemini*): Jupiter swung behind the Sun (conjunction) on June 24th, and will remain hidden in morning twilight until it reappears low in the northeast at dawn in mid-July. At that time, it will rise in the northeast at 4:30 am EDT, or only an hour before sunrise. By month's end, Jupiter will rise by 3:45 am, or over two hours before the Sun.

Earth: Earth reaches *aphelion* (its greatest distance from the Sun) on July 3rd, when it will be 94.5 million miles (1.017 AU) from the Sun, or about 3.4% farther from the Sun than it was in January. This, however, has a minimal effect on the seasons.

Constellations & Bright Stars Visible Around 10 pm EDT in July

Leo – very low in W, setting

Bright star *Regulus*, soon to set
Planet *Mars*

Virgo – low in WSW

Bright star *Spica*

Ursa Major – halfway up in NW, getting lower

Asterism *Big Dipper*, w/ pointer stars *Merak*, *Dubhe*;
handle stars *Alioth*, *Mizar* (& *Alcor*), *Alkaid*

Ursa Minor – halfway up in N, directly above North Star

Asterism *Little Dipper*, contains *Polaris* (North Star)

Boötes – high in WSW

Bright star *Arcturus*, well above *Spica*

Corona Borealis – high in SW, to upper left of Arcturus

Bright star *Alphecca* (a.k.a *Gemma*)

Hercules – overhead, highlighted by “keystone” of 4 stars

Bright stars *Rasalgethi*, *Kornephoros*

Libra – one-third of way up in SSW

Bright stars *Zubenelgenubi*, *Zubeneshchamali*

Scorpius – low in S

Bright star *Antares*

Ophiuchus – halfway up in S, above Scorpius

Bright star *Ras Alhague*

Sagittarius – low in SSE

Asterism the “Tea Pot”

Lyra – high in E, approaching overhead

Bright star *Vega*

Aquila – halfway up in SE

Bright star *Altair*

Cygnus – high in E, below Lyra

Bright star *Deneb*

Altair, *Deneb*, & *Vega* form the Summer Triangle

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/.