

Night Sky Viewing at Widener University

January 2025

Sunrise & Sunset Times (EST)

	Sunrise	Sunset
Begin Month	7:23 am	4:48 pm
End Month	7:10 am	5:20 pm

Lunar Phases



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

Venus (*in Aquarius-Pisces*): Blazing like a magnificent yellow star in the southwest in early evening, Venus leads a parade of bright planets across the night sky as 2025 commences. Venus reaches its greatest evening elongation with the Sun on the 9th, and sets just under 4 hours after the Sun, giving observers plenty of time to see it. A telescope reveals that Venus is half-illuminated, or at “quarter phase.”

Saturn (*in Aquarius*): As the New Year commences, Saturn can be found at nightfall in the southwest resembling a bright star to the upper right of the star Fomalhaut. Saturn sets by 10 pm, or over 5 hours after sunset, on January 1st, but by 8 pm, or 2½ hours after sunset, on the 31st. On the 17th, Saturn passes close to the left of Venus (a conjunction).

Jupiter (*in Taurus*): Jupiter, which was in opposition with the Sun back in early December, glows majestically, mimicking a brilliant cream-colored star in the constellation Taurus to the upper left of Aldebaran. Jupiter is well up in the southeast at nightfall in mid-January; it stands highest in the south at around 9 pm EST, and sets in the west by 4 am.

Mars (*in Cancer-Gemini*): Mars reaches its much-anticipated opposition with the Sun on January 15th, when Earth passes between Mars and the Sun. Because Mars’s orbit is moderately elliptical, closest approach between the two planets (63 million miles) occurs 3 days earlier, on January 12th. There is no mistaking Mars: it burns brilliantly with a reddish-orange hue near the border between Gemini and Cancer. At opposition, Mars rises in the northeast at sunset, stands highest in the south by midnight, and sets in the northwest at sunrise. Though not as bright as Jupiter, Mars rivals (and contrasts in color with) bluish-white Sirius, the brightest star in the night sky. Best of all, on the evening of the 13th, the full Moon occults (passes in front of) Mars.

Mercury (*in Ophiuchus-Sagittarius-Capricornus*): Mercury reached its maximum morning elongation with the Sun in late December, and it is still viewable in the predawn sky during the first week of January. On New Year’s morning, Mercury rises about 1½ hours before the Sun; it resembles a bright yellow star low above the southeastern horizon shortly before sunrise. By midmonth, Mercury is rising only an hour before sunrise, and thereafter it vanishes into the dawn twilight.

Earth: Earth reaches perihelion (closest approach to the Sun), on January 4th, when it will be 3½ % closer to the Sun than it was in July.

Quadrantid Meteor Shower: Peak intensity occurs on the late evening/early morning of January 3rd/4th. This year, the waxing crescent Moon will not interfere with the viewing..

Constellations & Bright Stars Visible Around 8 pm Local Time in January

Cetus – low in SW, getting lower
Bright stars *Diphda, Menkar*

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

Andromeda – high in W, above Pegasus
Bright stars *Alpheratz* (NE corner of Great Square), *Mirach, Almach*

Pisces – high in S, below the Great Square of Pegasus

Aries – high up in SSW, below Andromeda
Bright stars *Hamal, Sheratan*

Cassiopeia – high in NNW, looking like an “M”
Bright stars *Shedar, Caph, Ruchbah*

Perseus – nearly overhead, E of Andromeda
Bright stars *Mirfak* and *Algol*

Auriga – high in NE, E of Perseus
Bright star *Capella*

Taurus – high in S, below Perseus & Auriga
Bright star *Aldebaran*
Star clusters *Pleiades & Hyades*
Planet *Jupiter*

Orion – up in SE, is highest in S around 10-11 pm
Bright stars *Betelgeuse, Rigel*

Gemini – halfway up in E, to left of Orion
Bright stars *Pollux, Castor*
Planet *Mars*

Canis Major – low in SE, to lower left of *Rigel*
Bright star *Sirius*

Canis Minor – up in E, below Gemini & Orion
Bright star *Procyon*

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/.