Night Sky Viewing at Widener University January 2024

Sunrise & Sunset Times (EST)

	Sunrise	Sunset
Begin Month	7:23 am	4:47 pm
End Month	7:11 am	5:19 pm

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

Saturn (*in Aquarius*): Saturn has been a fixture in the evening sky since last summer, but not for much longer. As the New Year 2024 commences, Saturn can be found at nightfall in the southwest resembling a bright star to the upper right of the true star Fomalhaut. Saturn sets by 9 pm, or over 4 hours after sunset, on January 1st, but by 7:15 pm, or only 2 hours after sunset, on the 31st. Get one good last look at Saturn this month, as it will bid farewell to the evening sky in mid-February and reach conjunction with the Sun on February 28th.

Jupiter (in Aries): Now two months past its opposition with the Sun, Jupiter stands high in the south as darkness falls on January evenings in 2024. Though not as brilliant as Venus, which currently rules the morning sky, Jupiter is nevertheless a lovely sight, resembling a majestic golden star in the constellation Aries. Jupiter remains visible until it sets in the west around 2:15 am on the 1st, and by 12:30 am on the 31st.

Venus (*in Scorpius-Ophiuchus-Sagittarius*): Venus continues to dominate the pre-dawn sky into the New Year, shining like a yellow celestial jewel during the predawn hours. Venus rises in the southeast about 4:30 am, or nearly 3 hours before the Sun, on New Year's Day morning, and around 5:15 am on the 31st. As a bonus, Venus appears close to the bright orange star Antares in Scorpius during early January.

Mercury (in *Ophiuchus-Sagittarius*): Mercury resides in the dawn sky for the entire month of January. The innermost planet reaches its greatest morning elongation with the Sun on January 12^{th} , when it rises $1\frac{1}{2}$ hours before sunrise, although it will be in good position for viewing over the $1^{st} - 20^{th}$. Look for a bright star-like point in the morning twilight glow, low above the southeastern horizon about 30 minutes before sunrise. Binoculars will help to spot Mercury against the bright twilight.

Mars (*in Sagittarius*): Mars was in conjunction with the Sun back in November 2023, and as the New Year commences, it is now just beginning to reappear in the east at dawn. Mars rises in the southeast about one hour before sunrise all month, which is by 6:30 am on the 1st and by 6 am at month's end. On the morning of the 27th, Mars passes close to Mercury, a stunning pairing that will look best in binoculars.

Earth: Earth reaches perihelion, or closest approach to the Sun, on January 2^{nd} , when it will be $3\frac{1}{2}$ % closer to the Sun than it was in July.

Quadrantid Meteor Shower: Peak intensity occurs on January 3-4. Some of the fainter meteors will be washed out by moonlight from the last quarter Moon.

Lunar Phases









Last Quarter 3rd

11th

First Quarter 17th

Full 25th

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

Aquarius –low in SW, below the Great Square of Pegasus Planet Saturn

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

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

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*

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/.