

Night Sky Viewing at Widener University

September 2017

Sunrise & Sunset Times (EDT)

	Sunrise	Sunset
Begin Month	5:30 am	7:32 pm
End Month	6:57 am	6:45 pm

Lunar Phases



Naked Eye Planets This Month in the Evening & Morning Sky

Jupiter (*in Virgo*): Jupiter shines like a brilliant golden star low in the southwest during the early evening hours of September; it lies to the right of fainter bluish-white star Spica; both are setting in the west. Jupiter sinks below the horizon not long after sundown; it sets by 9:15 pm EDT on the 1st, and by just 7:30 pm, or less than an hour after sunset, on the 30th. By the end of the first week of October, Jupiter becomes lost in the glow of evening twilight. Jupiter reaches conjunction with the Sun in late October, and reappears in the dawn sky by mid-November.

Saturn (*in Ophiuchus*): Saturn reached opposition with the Sun back in June, and is still well placed for viewing on September evenings. At nightfall in mid-September, Saturn stands low in the south-southwest and resembles a bright cream-colored star above and to the far left of the orangish star Antares. Saturn sets around midnight at the start of September, and by 10:30 pm EDT on the 31st.

Venus (*in Cancer-Leo*): Venus looks like a radiant yellow jewel in the pre-dawn sky. Venus rises in the east-northeast around 4 am in early September, and just before 5 am at month's end. On the morning of the 20th, Venus will be in conjunction with the star Regulus, the two separated by only ½ degree, or the apparent width of the full Moon.

Mars (*in Leo*): Having passed conjunction with the Sun in late July, Mars begins to emerge from the dawn glow this month. As September opens, Mars rises around 5:30 am EDT, or only an hour before sunrise. By month's end, Mars is rising a half hour earlier, only a few minutes later than Venus and before the start of morning twilight. On the morning of the 16th, Mars passes close to Mercury in the sky, making for a beautiful sight to greet early morning risers. Use binoculars!

Mercury (*in Leo-Virgo*): Mercury can be found in the morning sky this month; it reaches greatest western elongation with the Sun on the 12th, when it rises above the eastern horizon 1½ hours before sunrise. Try to spot Mercury hovering low in the east about 30 minutes before sunrise; binoculars will help pick it out of the twilight. Mercury drops from sight toward the final days of September.

Earth: reaches the **Autumnal Equinox** on 22nd at 4:02 pm EDT. Summer ends and autumn begins in the Northern Hemisphere.

Sun (*in Leo-Virgo*): On September 16th, the Sun leaves the constellation Leo and enters Virgo.

Constellations & Bright Stars Visible Around 9 pm EDT

- 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 *Alphekka*)
- Hercules** – high overhead, 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 Scorpius’s tail;
- Ophiuchus** – halfway up in SW, above *Scorpius*
Bright star *Rasalhague*
Planet *Saturn* above & to left (E) of *Antares*
- 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 *Algol*

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/.