# Night Sky Viewing at Widener University

# April 2018

## Sunrise & Sunset Times (EDT)

|  | Sunrise | Sunset |
|---|---|---|
| Begin Month | 6:46 am | 7:26 pm |
| End Month | 6:03 am | 7:55 pm |

## Lunar Phases

| 3rd Quarter 8th | New 15th | 1st Quarter 22nd | Full 29th "Pink Moon" |
|---|---|---|---|

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

*Venus* (*in Aries-Taurus)*:   This April, Venus beams like a yellow diamond floating low above the horizon in the west-northwest, viewed about 30 minutes after sunset. Venus outshines everything in the night sky except for the Moon. On April 1st, Venus sets around 9 pm EDT, or 1½ hours after sunset, but it gets higher and sets later with each passing night. By the 31st, Venus has extended its post-sunset visibility to just under 2½ hours, setting a little after 10 pm.

*Jupiter* (*in Libra*):  Jupiter rises above the eastern horizon well before midnight this April; it resembles a brilliant cream-colored star brighter than anything else in the night sky except for Venus and the Moon.  As April opens, Jupiter is rising at around 10:30 pm EDT. By month's end, Jupiter is rising before 8:30 pm, which is only about half an hour after sunset.  Next month, on May 8th, Jupiter comes to opposition with the Sun when it will be closest to Earth and therefore at its brightest.

*Mars* (*in Sagittarius)*:  Mars rises above the southeastern horizon around 2 am EDT in mid-April. Early in the month, on the 2nd, Mars passes close to Saturn in the pre-dawn sky.  Mars resembles a modestly bright orange star, but as mentioned in last month's column Mars continues to brighten as the distance between it and Earth shrinks. In fact, Mars increases its brightness by over 50% just during the month of April. When Mars reaches opposition with the Sun in late July, it will outshine Jupiter and dominate the evening sky after Venus sets.

*Saturn* (*in Sagittarius*):  On the 1st, Saturn rises a few minutes after 2 am EDT, and is readily spotted at dawn; look toward the southeast for a cream-colored star, similar to Jupiter but not nearly as bright.  As April opens, Saturn is rising (along with nearby Mars) at about 2:15 am EST; by month's end, it is rising shortly after midnight, at around 12:15 am.

*Mercury* (*in Pisces-Cetus-Pisces)*:  Mercury is in conjunction with the Sun on April 1st and is therefore lost in the Sun's glare for the first half of the month. By mid-April, Mercury is rising above the eastern horizon during dawn twilight, and it continues to lengthen its angular distance from the Sun, ultimately reaching greatest western elongation with the Sun on the 27th. Even then, Mercury will be located only a few degrees above the horizon, and so the view of this elusive innermost planet will for many observers be obstructed by trees and buildings.

*Sun*:  (*in Pisces-Aries*):  The Sun begins April in the constellation Pisces, then crosses into Aries on the 18th.

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

*Auriga* – high in NW
> Bright star *Capella*

*Taurus* – getting low in WNW
> Bright star *Aldebaran*
> Star Clusters *Pleiades & Hyades*

*Orion* –getting low in WSW
> Bright stars *Betelgeuse*, *Rigel*

*Gemini* – high up in SW, to upper left of Orion
> Bright stars *Pollux, Castor*

*Canis Major* – up in SW, to lower left of Orion
> Bright stars *Sirius, Adhara*

*Canis Minor* – in SSW, below Gemini
> Bright star *Procyon*

*Leo* – high in S
> Bright star *Regulus*

*Ursa Major* – high in NNE
> Asterism *Big Dipper*, w/ pointer stars *Merak, Dubhe*;
> handle stars *Alioth, Mizar ( & Alcor), Alkaid*

*Hydra* – getting higher in SE
> Bright star *Alphard* ("the Solitary One"), lower R of
> Regulus

*Boötes* – high in NE, near handle of Big Dipper
> Bright star *Arcturus*

*Virgo* – rising in ESE
> Bright star *Spica*

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/.