**ASTRONOMY vs. ASTROLOGY**

**Bad news for believers in astrology!**

**The astrological dates associated with the Constellations of the Zodiac are NOT in accordance with astronomical observations. Moreover, the Sun is now seen to transit through 13 constellations, not 12, as generally believed.**

**Ergo: Your horoscope is of little value; the dates are wrong and quite different from those determined by astronomers, as explained below.**

**Owing to the precession of Earth’s axis the dates associated with the constellations of the Zodiac change over time. The apparent path of the Sun through the Constellations is called the Ecliptic, which intersects with the Celestial Equator, the extension of the Earth’s equator against the Celestial Sphere, at the Vernal and Autumn Equinoxes. Historically, an 18 degree wide belt around the Ecliptic was divided into 12 constellations. However, the Earth’s axis precesses (“wobbles”) in a circle slowly due to the gravitational pull of the Moon and the Sun, altering the Celestial Equator. A simple analogy is with that of a spinning top, tilted at an angle, which slowly wobbles in a circle while rotating much faster on its axis. Similarly, the Earth’s axis completes the Circle of Precession in 26,000 years, while rotating on its axis in one day or about 24 hours (23h 56 m, to be precise). In addition to precession of Equinoxes, another consequence is that the star Polaris will no longer be the North-star in a few thousand years; the Earth’s axis might point towards another bright star above it. The revised dates for the stars in Zodiacal constellations are given in the table below (International Astronomical Union).**

**Zodiac Constellations Dates: Ancient vs. Modern**

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| **Zodiac Sign** | **Ancient**  **(Circa ~1000 BC)** | **Modern**  **(Circa ~2011)** |
| 1. **Aries** | **Mar 21-Apr 20** | **Apr 19-May 13** |
| 1. **Taurus** | **Apr 21-May 21** | **May 14-Jun 20** |
| 1. **Gemini** | **May 22-Jun 21** | **Jun 21-Jul 20** |
| 1. **Cancer** | **Jun 22-Jul 23** | **Jul 21– Aug 10** |
| 1. **Leo** | **Jul 24-Aug 23** | **Aug 11-Sep 16** |
| 1. **Virgo** | **Aug 24-Sep 23** | **Sep 17-Oct 30** |
| 1. **Libra** | **Sep 24-Oct 23** | **Oct 31-21 Nov** |
| 1. **Scorpio** | **Oct 24-Nov 22** | **Nov 21-Nov 29** |
| **13. Ophiuchus**  **9. Sagittarius** | **-**  **Nov 23-Dec 21** | **Nov. 30-Dec 17**  **Dec 18-Jan 20** |
| **10 . Capricorn** | **Dec 22-Jan 20** | **Jan 21-Feb 16** |
| **11. Aquarius** | **Jan 21-Feb 19** | **Feb 17-Mar 11** |
| **12. Pisces** | **Feb 20-Mar 20** | **Mar 12-Apr 18** |