

# Camp Eberhart Astronomy Program

## AstroCamp Astrophysicist Award

---

- ❖ Give a short history of the science of astronomy, making reference to the outstanding people and events responsible for the advancement of the science.
- ❖ Commit to memory the lower case Greek alphabet.
- ❖ Demonstrate a proficiency in the use of a star atlas.
- ❖ Demonstrate a thorough understanding of the following:
  - Time
    - Solar Time
      - Apparent, Mean, Standard & Daylight time
      - Rules for computing Solar time
    - Sidereal Time
      - Rules for computing Sidereal Time.
  - Aberration of Light
  - Precession of the Equinoxes
  - Stellar Evolution
  - Spectroscopy; Spectral Analysis
- ❖ Right Ascension & Declination
  - Explain the concept of Right Ascension & Declination and their practical application in astronomy.
  - Using Right Ascension & Declination, a telescope & star atlas, locate the following:
    - One star of each magnitude from 1st to 10th magnitude.
    - Three variable stars
    - Five double, three triple and three quadruple stars.
    - Three globular and three galactic star clusters
    - Two planetary nebulae and three emission nebulae



- Five spiral, 1 elliptical and one irregular (if possible) galaxies.