

SLO Presentation

ASTR

Date: 09/11/2019

SCIENCE, ENGINEERING & MATH
ASTR
PSLO No PSLOs
CSLO ASTR102 - Introductory Astronomy: Stars and the Universe <ul style="list-style-type: none">• Students demonstrate a non-mathematical understanding of the scientific method.• Students demonstrate a non-mathematical understanding of ancient Greek and Renaissance astronomy.• Students demonstrate a non-mathematical understanding of repetitive sky motions, including lunar phases.• Students demonstrate a non-mathematical understanding of nuclear fusion and its role in the changing nature of stars.• Students demonstrate a non-mathematical understanding of the magnetic and sunspot cycles of the Sun.• Students demonstrate a non-mathematical understanding of the structure and evolution of galaxies.• Students demonstrate a non-mathematical understanding of our current understanding of cosmology, including the Big Bang and the cosmic background radiation. ASTR103 - Introductory Astronomy: The Solar System <ul style="list-style-type: none">• Students demonstrate a non-mathematical understanding of the scientific method.• Students demonstrate a non-mathematical understanding of the history of ancient Greek and Renaissance astronomy.• Students demonstrate a non-mathematical understanding of repetitive sky motions, including lunar phases.• Students demonstrate a non-mathematical understanding of the nebula hypothesis, including origins of asteroids and comets.• Students demonstrate a non-mathematical understanding of the composition, structure, and major processes of the planets and moons.• Students demonstrate a non-mathematical understanding of the origins and evolution of ring systems.• Students demonstrate a non-mathematical understanding of the magnetic and sunspot cycles of the Sun. ASTR104 - Life in the Universe <ul style="list-style-type: none">• Students will be able to demonstrate a non-mathematical understanding of the scientific method.• Students will be able to demonstrate a non-mathematical understanding of the history of astronomy.• Students will be able to demonstrate a non-mathematical understanding of our current understanding of the origin and evolution of the universe and all of its varied astronomical contents (galaxies, stars, planets, etc.).• Students will be able to demonstrate a non-mathematical understanding of the basic tenets of biology and chemistry and how they pertain to life and its origins• Students will be able to demonstrate a non-mathematical understanding of the complex connections between astronomy, biology, geology, and chemistry as pertains to the origin and evolution of life on Earth.• Students will be able to demonstrate a non-mathematical understanding of the possibility of habitable zones off Earth and what they require to exist as possible havens for life.• Students will be able to demonstrate a non-mathematical understanding of the possibilities for finding and/or communicating with life off Earth. ASTR105L - Observational Astronomy <ul style="list-style-type: none">• Students will be able to demonstrate an understanding of the scientific method.• Students will be able to demonstrate an understanding of the celestial sphere.• Students will be able to demonstrate an understanding of optics.• Students will be able to demonstrate an understanding of telescopes and telescopic viewing.• Students will be able to demonstrate an understanding of spectroscopy and its uses.• Students will be able to demonstrate an understanding of other topics as defined by the current lab manual.

ASTR106 - History of Astronomy

- Students will be able to demonstrate a non-mathematical understanding of the origins of Astronomy.
- Students will be able to demonstrate a non-mathematical understanding of historical models of the cosmos.
- Students will be able to demonstrate a non-mathematical understanding of pivotal figures in the advancement of Astronomy.
- Students will be able to demonstrate a non-mathematical understanding of important controversies in the history of Astronomy.
- Students will be able to demonstrate a non-mathematical understanding of the current state of Astronomical knowledge.