

PHYS 70200
Introduction to Astrophysics
(1 credit)
Graded S/U

An introduction to the physics of research at the forefront in Astrophysics.

- The Hot Big Bang
- Thermodynamics early universe
- Astrophysical hydrodynamics
- Astrophysical Relativity
- Cosmic microwave background radiation
- Dark matter and Dark energy
- Cosmological density fields/perturbations
- Intergalactic medium
- Galaxies: Galaxy formation, morphology, and dynamics
- Star formation and the interstellar medium
- Stars: star formation, stellar interiors, stellar evolution, nucleosynthesis, stellar remnants

Level:

- First-year graduate students

Counts as:

- For graduate students: A one-credit course that counts towards the breadth requirement.

Offered: Every fall.

PHYS 70400. Introduction to Astrophysics
(1-0-1) Mathews

An introduction to the physics of research at the forefront in astrophysics. Topics discussed include the hot Big Bang; thermodynamics of the early universe; astrophysical hydrodynamics; astrophysical relativity; cosmic microwave background radiation; dark matter and dark energy; cosmological density fields and perturbations; the intergalactic medium; galaxies (galaxy formation, morphology, and dynamics); star formation and the interstellar medium; and stars (star formation, stellar interiors, stellar evolution, nucleosynthesis, and stellar remnants). Counts towards the breadth requirement for first-year graduate students.