EAS 171
Astronomy and Meteorology
Objective Sheet: Cosmology

Vocabulary:

uniformitarianism  extra-terrestrials  thermodynamics
catastrophism  "LAWKI"  Olber's Paradox
primeval atom  cosmological principle  "fossil radiation"
cosmology  perfect cosmological principle  Drake equation
entropy  principle
Hubble's Law  red shift

Objectives:

1. Discuss the major limitation on cosmological studies in terms of the scientific method of inquiry.

2. Outline the basic ideas of the Big Bang, Oscillating Universe, Steady-State, and Special Creation cosmological models.

3. Explain the importance of the First and Second Laws of Thermodynamics in respect to cosmological models.

4. Write the Drake Equation and describe the astronomical, biological, and sociological factors.

5. Discuss the problems of attempting to search for and to communicate with extra-terrestrial civilizations.

6. Discuss the contributions of astronomical studies and space exploration to our everyday lives.