

COURSE DETAIL

COSMOLOGY

Country

United Kingdom - Scotland

Host Institution

University of Edinburgh

Program(s)

University of Edinburgh

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Physics

UCEAP Course Number

105

UCEAP Course Suffix**UCEAP Official Title**

COSMOLOGY

UCEAP Transcript Title

COSMOLOGY

UCEAP Quarter Units

4.00

UCEAP Semester Units

2.70

Course Description

The course introduces the fundamental concepts of modern cosmology. The meaning of time and space in an expanding universe are discussed, and the dynamics of the expansion, starting from a hot Big Bang. Observational evidence includes the abundance of light elements, the microwave background, and large-scale structure. The initial conditions for the expansion require careful tuning, leading to the theory of inflation. The standard model of cosmology is introduced and elements such as dark matter and dark energy are explained.

Language(s) of Instruction

English

Host Institution Course Number

PHYS10101

Host Institution Course Title

COSMOLOGY

Host Institution Campus

Edinburgh

Host Institution Faculty

Host Institution Degree

Host Institution Department

Physics and Astronomy

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