COURSE DETAIL

EXTRATERRESTRIAL PLANETS AND LIFE
Country Korea, South
Host Institution Seoul National University
Program(s) Seoul National University
UCEAP Course Level Lower Division
UCEAP Subject Area(s) Physics Earth & Space Sciences
UCEAP Course Number 78
UCEAP Course Suffix
UCEAP Official Title EXTRATERRESTRIAL PLANETS AND LIFE
UCEAP Transcript Title EXOPLANETS AND LIFE
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

This course explores whether the chemical and biological evolutions on the Earth could be a universal phenomenon in the galaxy. From an astronomical point of view the course examines the evolution of cosmic matter up to heavy elements, which are essential ingredients for forming biological creatures.

Topics include: modern search techniques, their limitations, and potential search technologies of the future; the formation of terrestrial planets as distinguished from Jovian; how orbits of the exo-planets are analyzed for evidence that they may be solar terrestrial planets; the evolutionary path of Earth over the last 4.6 billion years; the Goldilocks problem of atmospheric evolution; birth and growth of civilization; parameterization of human ignorance by Drake's equation; Gaia, and Ohn-Saeng Myung; interstellar communication; terraformation of Mars; heavens and hells.

Language(s) of Instruction
English

Host Institution Course Number
046.007

Host Institution Course Title
EXTRATERRESTRIAL PLANETS AND LIFE

Host Institution Course Details
https://astron.snu.ac.kr/en/%EA%B5%90%EC%96%91/

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2024-2025

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