

COURSE DETAIL

SOIL ECOLOGICAL CHEMISTRY

Country

Korea, South

Host Institution

Seoul National University

Program(s)

Seoul National University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Environmental Studies

UCEAP Course Number

178

UCEAP Course Suffix**UCEAP Official Title**

SOIL ECOLOGICAL CHEMISTRY

UCEAP Transcript Title

SOIL ECOLOGICAL CHM

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course for advanced undergraduate students covers components and biochemical processes of terrestrial ecosystems. Human activities have altered more than half of the ice-free terrestrial ecosystems. Students learn the components of Earth system including atmosphere, ocean, soil, and biota, and understand how these components influence the cycles of elements, water, and energy. Students are expected to discuss temporal and spatial changes of the components and consider the integrated effects of these changes on soil functions at diverse scales ranging from plots, regions, and the globe.

Topics include History of ecosystem ecology, Water and energy balance, Plant photosynthesis: carbon input to terrestrial system, Plant and ecosystem carbon budgets, Terrestrial carbon losses, Terrestrial nutrient cycling, Temporal and spatial dynamics, Anthropocene.

Language(s) of Instruction

English

Host Institution Course Number

M1678.001600

Host Institution Course Title

SOIL ECOLOGICAL CHEMISTRY

Host Institution Course Details

<https://sugang.snu.ac.kr/>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2025-2026

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