

## 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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