

COURSE DETAIL

FERMENTATION AND INDUSTRIAL MICROBIOLOGY

Country

Korea, South

Host Institution

Korea University

Program(s)

Korea University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences Biochemistry

UCEAP Course Number

157

UCEAP Course Suffix**UCEAP Official Title**

FERMENTATION AND INDUSTRIAL MICROBIOLOGY

UCEAP Transcript Title

FERMNT&INDUST MICBI

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course explores the chemistry and biochemistry of fermentation and microbial metabolism, with a focus on their applications in metabolic engineering and enzymatic conversion. Students examine current trends and industrial examples involving the production of food biomaterials, biofuels, chemicals, and bioplastics through microbial fermentation. Emphasis is placed on both fundamental principles and applied strategies for microbial process development. Students gain a comprehensive understanding of fermentation chemistry and acquire applied knowledge in microbial metabolic engineering for the production of value-added products such as food additives, industrial chemicals, and renewable biofuels.

Prerequisites: Prior coursework in biochemistry and microbiology is strongly recommended.

Language(s) of Instruction

English

Host Institution Course Number

LIFS404

Host Institution Course Title

FERMENTATION AND INDUSTRIAL MICROBIOLOGY

Host Institution Course Details

<https://infodepot.korea.ac.kr/lecture1/lecsujectPlanViewPop.jsp?%0AlanguageDiv...>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2025-2026

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