

COURSE DETAIL

GENETICS

Country

Korea, South

Host Institution

Korea University

Program(s)

Korea University

UCEAP Course Level

Lower Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

43

UCEAP Course Suffix**UCEAP Official Title**

GENETICS

UCEAP Transcript Title

GENETICS

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course introduces fundamental principles of genetics including Mendelian and non-Mendelian inheritance, chromosome and genome structure, genetic variation, and basic concepts in population genetics. Genetics is the study of how biological traits are transmitted from parents to offspring through genes and how genetic variation shapes biological diversity within populations. The course integrates classical genetics with modern genomic technologies, including next generation sequencing (NGS) and large-scale genomic data analysis. Students learn how genetic variation influences biological systems and human disease.

Topics include The Human Genome Project and modern sequencing technologies, Mendelian genetics and inheritance patterns, Polygenic traits and genetic architecture, Recombination, linkage, and population genetics, From genetic variants to biological systems and disease.

Prerequisites: General Biology

Language(s) of Instruction

English

Host Institution Course Number

BSMS205

Host Institution Course Title

GENETICS

Host Institution Course Details

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

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2025-2026

[Print](#)