

Fundamental Genetics

Syllabus Number

5C121

Basic Major Subjects

Elective Requisites 2
credit

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1. Course Description

The purpose of this course is to learn

(1)DNA, chromosome, cell proliferation

(2)Mendel's law

(3)population genetics

This course relate to diplomatic policy 1 and 2.

2. Course Objectives

The aim of this course is to understand general mechanisms.

(1)Mendel's law

(2)Chromosome map

(3)Hardy-Weinberg's law

3. Grading Policy

The learning results are evaluated based on : tests (80%) and reports (20%).

4. Textbook and Reference

Textbook

基礎遺伝学 ISBN 978-7853-5814-3

ケイン基礎生物学 ISBN 978-4-8079-077-0

遺伝学の基礎 ISBN978-4-254-40549-1

5. Requirements(Assignments)

A mini-test at first lecture will check your learning progress. This result is not included in the grade.

6. Note

7. Schedule

- [1] Guidance and mini-test
- [2] DNA, gene, chromosome
- [3] mitosis and meiosis
- [4] genotype and phenotype
- [5] Mendel's law
- [6] non-mendel's law
- [7] linkage and crossing over
- [8] chromosome mapping (2 point cross)
- [9] chromosome mapping (3 point cross)
- [10] midterm test
- [11] explanatory notes of midterm test and genetic variant
- [12] dependence of chromosome and genetics
- [13] population genetics
- [14] Hardy-Weinberg's law
- [15] Final test