

Basic Biology

Syllabus Number

5D160

Special Subjects

Elective 2 credit

SAITO, Takeshi

1. Course Description

The purpose of this course is to learn

- (1) Introduction to Cells biology
- (2) Introduction to Animals biology
- (3) Introduction to Plants biology

This course relate to diplomatic policy 1.

2. Course Objectives

The aim of this course is to understand general biological mechanisms.

3. Grading Policy

The grading is evaluated based on an examination or a report given by each teacher. We will give feedback upon returning the report or the examination.

4. Textbook and Reference

Textbook

No fixed textbook. Prints will be distributed.

5. Requirements(Assignments)

In each lecturer topic, students should review the biology they learned in high school (30 min). Students should review of each lecture or preparation of reports (60 min) .

6. Note

We recommend that students take this course if they plan to take "Fundamental Genetics".

7. Schedule

- [1] Guidance
- [2] Formation of cells (Dr. Takayama)
- [3] DNA, chromatin, nucleosome (Dr. Takayama)
- [4] DNA replication, transcription, translation (Mr. Saito)
- [5] Mitosis (Dr. Takayama)
- [6] Meiosis (Dr. Takayama)
- [7] Fundamental laws of inheritance 1 (Mr. Saito)
- [8] Fundamental laws of inheritance 2 (Mr. Saito)
- [9] Animal reproduction and development (Dr. Ota)
- [10] Environmental response of animals (Dr. Hirasawa)
- [11] Animal homeostasis (Dr. Uchino)
- [12] Plant development (Dr. Asahina)
- [13] Plant reproduction (Dr. Asahina)
- [14] Environmental response of plant (Dr. Asahina)
- [15] Conclusion