

Trends in Biosciences

Syllabus Number

5M373

Special Subjects

Elective 2 credit

Each Staff

1. Course Description

This course is an omnibus style lecture, and will be presented by each professor in the department of biosciences. The topics are covered in this course include subjects of biosciences as well as those of environmental sciences and chemistry. Since this course provides students with the individual research themselves of the professors, it will be helpful selecting the graduation research. Therefore, this course, students must attend all lectures.

Please check the schedule before the beginning of the course.

2. Course Objectives

The major aim of this course is to present an opportunity for students to obtain a basic knowledge of every branch of the biosciences. Upon successful completion of this course, students will have gained a fundamental understanding of biosciences.

3. Grading Policy

Each instructor asks for submission of an assignment such as an exam and a report every time. Evaluate based on the total. Final test will not be conducted.

4. Textbook and Reference

5. Requirements(Assignments)

6. Note

7. Schedule

- [1] Plant environmental response and acclimation (Prof.Asahina).
- [2] Chemical synthesis of bioactive substances and their structural analysis(Prof. Uchida)
- [3] The neuroscience of developmental disorders(Prof.Uchino)

- [4] Function and use of animal products(Prof. Enomoto)
- [5] Invitation to fieldwork using novel technology(Prof.Kajitani)
- [6] Application of ceramides ingredient to health food (Prof. Koga)
- [7] Bioactive substances with function in environment(Prof Sakuda)
- [8] Photo-perception and light harvesting in green plants and microorganisms (Prof.Shinomura)
- [9] Discovery of bioactive compounds from microorganisms (Prof. Takahashi)
- [10] The Chromosomal theory of inheritance.(Prof. Takayama)
- [11] Brain development-How we construct our brain during the development?(Prof. Hirasawa)
- [12] Plant immunity(Prof. Miyamoto)
- [13] Chemistry of Supercritical Fluids (Prof. Yanagihara)
- [14] Bioengineering of blood vessels (Prof. Yoshinari)
- [15] Conclusion