

<<Last Updated:2021/03/22>>

Course Schedule Information

Course Code	329001
Semester	Fall Term
Day and Period	Other
Course Name (Japanese)	ナノ生体科学概論I
Course Name	Introduction to Nanobiology I
Capacity	0
Course Numbering Code	32FRBI5K120
Credits	0.5
Student Year	1,2
Instructor	Ishijima Akihiko,福岡 創

Basic Syllabus Information

Eligibility	1st , 2nd grade
Required/Optional	Optional
Schedule	Spring term, intensive course
Room	Seminar room, Nano-biology building 3F

Detailed Syllabus Information

Course Name	Biophysics
Language of the Course	Japanese
Type of Class	Lecture Subject
Course Objective	The objective of this lecture is to understand life science, the basics and the methodology, quantitatively based on physical methods. The goal of this lecture is to understand biology using mathematics, statistical mechanics, etc. rather than just understanding biology as knowledge. Especially, we will focus on the observing and measuring method by using optical microscope. In the second half of the lecture, lectures will be given on the latest research methods using biophysics, focusing on bacterial flagellar motors and chemotaxis. Since preparation of biological samples for measurement requires knowledge of molecular biology, gene manipulation techniques using molecular biology are explained according to the actual flow of research.
Learning Goals	Quantitative understanding the phenomenon of living organisms by using biophysics
Requirement / Prerequisite	
Class Plan	01: Basics of physics, Basics of biochemistry, Statistical mechanics 02: Basics of optical microscope, Latest imaging technology 03: Gene manipulation according to the actual flow of research 04: Research methods using biophysics, focusing on bacterial flagellar motors and chemotaxis
Independent Study Outside of Class	
Textbooks	Not specified
Reference	
Grading Policy	Report
Other Remarks	
Special Note	

Instructor(s)

Instructor Name	Name (hiragana)	Extension	E-mail
No data found			

Cautions for Students

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