



CampusPlan Web Service

Syllabus Reference

Course title	Molecular and Cellular Biology 1		
Term	前期 1st Half		
Credit(s)	1		
The main day		The main period	
Program/Department	49 Genetics		
Lecturers			
成績評価区分 Grading Scale	A, B, C, Dの4段階評価 Four-grade evaluation		
レベル Level	Level 2		
力量 Competence	専門力 Academic expertise		

Instructor
<div>Full name</div> <div>* MAESHIMA KAZUHIRO</div>

Outline	Basic features of molecular and cellular biology will be lectured and discussed. These include genome, regulation of transcription and translation, protein structure and function, post-translational modification, structure and dynamics of chromosome.
Learning objectives	1. Elucidation of biological phenomena at a molecular level 2. Understanding methods to analyze at a molecular level
Grading policy	The grades will be A, B, C, and D, which are determined by the quality of the paper, which must be submitted to the lecturer by the provided deadline. The subject(s) of the paper must be one of the four important aspects that are presented in the above Course Objectives.
Lecture Plan	<p>April 28, 2023– June 16, 2023 13:30–15:10 on Fridays</p> <p>2023 April 28 Kazuhiro Maeshima, DNA and Structure of Chromosome May 12 Yasuto Murayama, Partition of Chromosomes May 19 Masato Kanemaki, Replication, Recombination and Repair of Chromosome May 26 Koichi Kawakami, Transposable Element June 2 Yuta Shimamoto, Structure and Function of Protein</p> <p>June 9 Jun-ichi Nakayama, Regulation of Transcription June 16 Nobuyuki Shiina, Regulation of Translation</p>
Location	Oral and Zoom: Lecture Room (B202) or Seminar Room (B301), 2nd or 3rd floor of Library in the National Institute of Genetics / Seminar Room 4 (131) 1st floor in the National Institute for Basic Biology
Language	English
Textbooks and references	Molecular Biology of the Cell (7th eds), B. Alberts et al., W. W. Norton & Company. Lewin's Genes XII, J.E. Krebs et al., Jones&Bartlett Learning
Notes for students of other programs	It is given as an oral lecture, which will be provided in English.

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Syllabus Reference

Course title	Molecular and Cellular Biology 2		
Term	後期 2nd Half		
Credit(s)	1		
The main day		The main period	
Program/Department	49 Genetics		
Lecturers			
成績評価区分 Grading Scale	A, B, C, Dの4段階評価 Four-grade evaluation		
レベル Level	Level 2		
力量 Competence	専門力 Academic expertise		

Instructor
<div>Full name</div> <div>* MAESHIMA KAZUHIRO</div>

Outline	Basic features of molecular and cellular biology will be lectured and discussed. These include dynamics of cell, organelles and cytoskeleton, metabolism, protein traffic, signal transduction and cell imaging.
Learning objectives	1. Elucidation of biological phenomena at a cellular level 2. Understanding methods to analyze at a cellular level
Grading policy	The grades will be A, B, C, and D, which are determined by the quality of the paper, which must be submitted to the lecturer by the provided deadline. The subject(s) of the paper must be one of the four important aspects that are presented in the above Course Objectives.
Lecture Plan	<p>October 20, 2023– January 26, 2024 13:30–15:10 on Fridays</p> <p>2023 October 20 Shin-ya Miyagishima, Cell Structure October 27 Akatsuki Kimura, Cytoskeleton November 17 Tomomi Tsubouchi, Cell Cycle and Cell Differentiation November 24 Shigenori Nonaka, Cilia and Flagella December 15 Takashi Ueda, Intracellular Transport</p> <p>2024 January 5 Kazuhiro Aoki, Signal Transduction January 19 Yoshiaki Kamada & Shoji Mano, Autophagy January 26 Yuhei Goto, Meiosis</p>
Location	Oral and Zoom: Lecture Room (B202) or Seminar Room (B301), 2nd or 3rd floor of Library in the National Institute of Genetics / Seminar Room 4 (131) 1st floor in the National Institute for Basic Biology
Language	English
Textbooks and references	Molecular Biology of the Cell (7th eds), B. Alberts et al., W. W. Norton & Company. Lewin's Genes XII, J.E. Krebs et al., Jones&Bartlett Learning
Notes for students of other programs	It is given as an oral lecture, which will be provided in English.

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