Course title	Evolutionary Genomics		
Term	後期 2nd Half		
Credit(s)	1		
The main day		The main period	
School/Program	School of Life Science		
Department/Program	Department of Genetics		
Category	Genetics		
Lecturers	KITANO Jun and others		

Instructor

Full name	
* KITANO JUN	

Outline	After introduction of basic knowledge on various fields of evolutionary and population genetics, such as adaptive evolution, neutral evolution, speciation, and symbiosis evolution, we discuss what kinds of new questions will be possible to answer by employing emerging genomic technologies.	
Goal	Study basics of evolutionary genetics and recently developed genomic tools applied to the field. Understand what kinds of research questions you can address employing evolutionary genetic and genomic tools.	

Grading system

		Grading system	
Grading system		01:Four-grade evaluation (A, B, C, D)	
Grading policy	To obtain credit one must attend at least three of the classes and submit a report on either one of the classes or the entire course. The report should summarize what you learnt from the lecture and how you would be able to apply the methods or the ways of thinking to your own research within about 1 page of A4-sized paper. The grades will be A, B, C, and D, which are determined by the quality of the report.		
Lecture Plan	After introduction of basic knowledge on various fields of evolutionary and population genetics, such as adaptive evolution, neutral evolution, speciation, and symbiosis evolution, we discuss what kinds of new questions will be possible to answer by employing emerging genomic technologies. 13:30 - 15:10 on Fridays Nov 11: Introduction to population genomics (Jun Kitano) Nov 18: Population genetic theories of genome evolution (Hiroshi Akashi) Nov 25: Genomic signatures of adaptation (Tomotaka Matsumoto) Dec 2: Genomics of speciation (Yo Yamasaki) Dec 9: Comparative genomics (Shigehro Kuraku) Dec 16: Symbiosis evolution (Shin-Ya Miyagishima) Dec 23: Metagenomics and evolutionary biology (Ken Kurokawa) 2023年 Jan 6: Genome database for evolutionary reaserach (Yasukazu Nakamura)		
Location	Zoom		
Language	English		
Textbooks and references	None		