

Course title	Evolutionary Genomics	
Term	後期 2nd Half	
Credit(s)	1	
The main day		The main period
Program/Department	Genetics Program	
Lecturers	KITANO Jun and others	
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 3	
力量 Competence	専門力 Academic expertise	

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.
Learning objectives	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 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 2024 Nov 8 : Genomic signatures of adaptation (Jun Kitano) Nov 15 : Population genetic theories of genome evolution (Hiroshi Akashi) Nov 22 : Genomics of speciation (Yo Yamasaki) Nov 29 : Symbiosis evolution (Shinya Miyagishima) Dec 6 : Comparative genomics (Shigehiro Kuraku) Dec 13 : Genome database (Yasukazu Nakamura) Dec 20 : Metagenomics and evolution (Ken Kurokawa) 2025 Jan 10 : Eco-Evo feedback (Masato Yamamichi)
Location	Oral and Online: Seminar Room of the 2nd or 3rd floor of Library in the National Institute of Genetics
Language	English
Textbooks and references	None
Notes for students of other programs	None
Contact for Course Inquiries	Academic Services Division of NIG: info-soken@nig.ac.jp