Course title	Developmental Biology Ⅱ		
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	SAWA Hitoshi		

Instructor

Full name
* SAWA HITOSHI

Outline	Various developmental events, such as cell fate determination, cell differentiation, morphogenesis and animal behavior will be analyzed in light of gene expression, cell-cell interaction, intracellular signaling and evolution. Classes will be run by critical reading of the primary literature and discussion.
Goal	Development can be viewed as an integral of molecular and cell biological events, and also is a process though which evolutionary changes in form is generated. Through discussing how the principles and concepts of developmental biology developed and what kind of new challenges they generate, students are expected to nurture their framework in which they conduct their own work in various disciplines.

Grading system

	Grading system
Grading system	01:Four-grade evaluation (A,B,C,D)

Grading policy	To obtain credit one must attend five or more classes (of total of eight classes) . Grades (A, B, C, D) will be determined based on the activity of discussion with lecturer and other students s.
Lecture Plan	This course will introduce basic principles and concepts of that direct developmental phenomena. Various developmental events, such as cell fate determination, cell differentiation, morphogenesis and animal behavior will be analyzed in light of gene expression, cell-cell interaction, intracellular signaling and evolution. Classes will be run by critical reading of the primary literature and discussion. Please download the paper from links below and take a look at it in advance. It is not necessary to have completely understood the paper before coming to class. This course will be conducted in English. For questions and comments in Japanese, lecturers will provide simultaneous translation service to English. 11/ 7 SAWA Hitoshi Asymmetric division and phase separation 11/21 TSUDA Katsutoshi Signal canalization for tissue differentiation 11/28→12/26 Kawakaimi Koichi Genetic compensation 12/ 5 NOSAKA Misuzu Mechanical stress and morphogenesis 12/12 SAKAI Noriyoshi Stem cell niche 12/19 YONEHARA Keisuke Body axes determination 1/16 NAKAGAWA Naoki Gyrification of the cerebral cortex 1/23 KAWASAKI Takahiko Environmental factors involved in development
Location	B301
Language	English
Textbooks and references	Classes will be run by discussion based on the content of the primary literature. Please download the paper from links below and take a look at it in advance. It is not necessary to have completely understood the paper before coming to class.
Others	Familiarity with basic concepts of Molecular and Cell Biology is recommended.