

Subject (English)	Molecular and Cellular Biology		Semester	Spring	Day/Slot	Fri./2nd 10:30-12:00
科目名 (日本語)	分子細胞生物学					
Course Code	VJ252S5	Course Numbering	SBI-BIO802E		Period	Apr. 12 – Jul. 19, 2019
Instructor (Post)	M. Koganezawa, <i>et al.</i> (Assoc. Prof.)			Campus	Aobayama	
				Building	<a href="#">Biology Building (H15)</a>	
Faculty	Faculty of Science		Credits	2	Class Room	Meeting room 3 (107)
Class subject	Molecular and Cellular Biology					
Object and summary of class						
This course offers an introduction to biochemistry, genetics, cell biology, early development, and neurobiology. This course is an omnibus lecture consisting of multiple topics.						
Keywords	biochemistry, genetics, cell biology, developmental biology, neurobiology					
Goal of study						
Learn the basic concept of molecular and cellular biology, which is the basis of modern biology. Understand the cell as the basic unit of life; its composition, functions, replication, and differentiation.						
Contents and progress schedule of class						
No	Date	Topics			Instructor	
1	4/12	Dynamic cellular behaviors in embryogenesis			ASAKO SUGIMOTO	
2	4/19	Germline cell development in animal embryos			GAKU KUMANO	
3	5/10	Molecular biology of plant			RYUSUKE YOKOYAMA	
4	5/17	Development of the nervous systems			KENTARO ABE	
5	5/24	Pattern formation in vertebrates			KOJI TAMURA	
6	5/31	Integrative function of the cerebral cortex			KENICHIRO TSUTSUI	
7	6/7	Reward, punishment, and neural circuits			HIROMU TANITOMO	
8	6/14	Neural mechanisms of courtship behavior			MASAYUKI KOGANEZAWA	
9	6/21	Membrane dynamics in cells			MITSUMORI FUKUDA	
10	6/28	Cell death and movement in epithelial morphogenesis			ERINA KURANAGA	
11	7/5	Pattern Formation in Plants			JUNKO KYOUZUKA	
12	7/12	Neural circuit for reward and punishment			NOBUHIRO YAMAGATA	
13	7/19	Innate immunity and membrane trafficking			TOMOHIKO TAGUCHI	
Preparation	N/A					
Record and evaluation method	For evaluation, students are required to attend the class, and must submit an essay dealing with a topic covered in one of the lectures.					
Textbook and references	The printout of reference material will be distributed every time.					
Self study	N/A					
In addition	N/A					