

Course number	Name of the Course			Japanese Name	
HE40151	Clinical Pathophysiology			臨床病態学	
Class	Unit	Module	Week	Time	Room
3,4 year	2 unit	Autumn A Autumn B	Tue Thu	4&5 hour 5&6 hours	4B-209
Instructors (Office · Tel · email · Office hour)					
Haruhiko NINOMIYA, MD, PhD (4B-406) (pm 1:00 - pm 5:00)					
Objectives					
○ To obtain the basic knowledge about the pathophysiology of major disorders.					
Language: <input checked="" type="checkbox"/> / <input type="checkbox"/> Japanese、 <input checked="" type="checkbox"/> English、 <input type="checkbox"/> Bilingual					
	Date	Name of instructor	Lecture outline		
1	10/2	H. Ninomiya	Fundamentals		
2	10/16	H. Ninomiya	Temperature, Energy		
3	10/23	H. Ninomiya	Blood		
4	10/30	H. Ninomiya	Respiration, Acid-Base Balance		
5	11/6	H. Ninomiya	Kidney, Salt and Water Balance		
6	11/15	H. Ninomiya	Stomach, Intestines, Liver		
7	11/29	H. Ninomiya	Heart and Circulation		
8	12/6	H. Ninomiya	Metabolism		
9	12/13	H. Ninomiya	Hormones		
10	12/20	H. Ninomiya	Neuromuscular and Sensory System		
Levels for credit needed	moderate				
Text and materials	Color Atlas of Pathophysiology (Silbernagl & Lang) 2 nd Ed. (Thieme)				
Grade evaluation	End-term examination				
Remarks : e-learning assist via “manaba” (https://manaba.tsukuba.ac.jp/) @Auto-video recording system-equipped classroom (4B-209)					