

Module Code	20349012	Course Term
Course Subject Name	<b>Physiology</b>	<b>Spring</b>
Course Tutor	Ka Fai William Tse Miki Nakao	The 4th Semester
Credit	1	Taught Day
Schools	School of Agriculture	<b>FRI-2</b>
Taught Year	The 2nd year	
Campus	Ito campus	
Subject Area	Lecture	
Course Subject Classification	Common Basic Subjects	
Course Requirements		Friday, 2nd period (10:30-12:00)
Course Requirement (Pre-requisite)		
<b>Course Outline</b>		
Students learn basic concept in general physiology through class lectures and problem-based learning.		
<b>key words</b>		
Cardiovascular system, homeostasis, respiratory system, urinary system, innate and adaptive immunity		
<b>Study Objectives (General)</b>		
To introduce the general concept in physiology, bioanalysis, and immunity		
<b>Study Objectives (Specific)</b> The course aims to achieve the following:		
A. Cardiovascular system		
B. Respiratory system		
C. Urinary system		
D. Bioanalysis		
E. Immunity		
<b>Course Plan</b>		
1. Overview: Homeostasis		
2-3. Cardiovascular system: circulatory system; fetal circulation; hepatic portal circulation; heart; heart failure; blood.		
4-5. Respiratory system: lung; gaseous exchange; hemoglobin; regulatory mechanism; lung failure.		
6-7. Urinary system: kidney; nephron; urine formation; glomerular filtration; regulation of water and electrolyte; kidney failure.		
8. Mid-term exam.		
9. Introduction to immunology, the challenges and the requirements		
10. Cell and tissues of the immune response		
11-12. Innate immunity and pattern recognition		
13-14. Overview of adaptive immunity		
15. Final exam		
<b>Course Approaches</b>	Lecture	
<b>Textbooks</b>	NIL For 9-14: Undergraduate Immunology by Clett Erridge (Only available from Amazon as a Kindle book. Price = 601 yen.)	
<b>Reference Books</b>	Essentials of human anatomy and physiology (Pearson education)	
<b>Study consultation (office hour)</b>	Office: Room 518, Agriculture Building Email: kftse@agr.kyushu-u.ac.jp mikimnakao@kyida.jp (for immunity contents)	
<b>Exams/Results Evaluation Method</b>	1. Attendance and class participation/activities: 20% 2. Written report: 30% 3. Final exam: 50%	
<b>Others</b>		