

Module Code	21349058	Course Term
Course Subject Name	Physiology	Spring
Course Tutor	Ka Fai William Tse Miki Nakao	The 4th Semester
Credit	2	Taught Day
Schools	School of Agriculture	FRI-2
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)		
Course Outline		
Students learn basic concept in general physiology through class lectures and problem-based learning.		
key words		
Cardiovascular system, homeostasis, reproductive system, urinary system, innate and adaptive immunity		
Study Objectives (General)		
To introduce the general concept in physiology, bioanalysis, and immunity		
Study Objectives (Specific) The course aims to achieve the following:		
A. Cardiovascular system B. Respiratory system C. Urinary system D. Bioanalysis E. Immunity		
Course Plan		
1. Overview; Homeostasis 2-3. Cardiovascular system: circulatory system; heart; ECG; heart failure; blood; blood type; fetal circulation 4-5. Respiratory system: breathing; gaseous exchange; hemoglobin; regulation of oxygen binding; fetal hemoglobin; respiratory diseases 6-7. Urinary system: kidney; nephron; urine formation; glomerular filtration; kidney failure; regulation of water and electrolyte 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		
Course Approaches	Lecture	
Textbooks	NIL For 9-14: Undergraduate Immunology by Clett Erridge (Only available from Amazon as a Kindle book. Price = 601 yen.)	
Reference Books	For 1-8: Essentials of human anatomy and physiology (Pearson education)	
Study consultation (office hour)	Office: Room 580, Agriculture Building Email: kftse@agr.kyushu-u.ac.jp mikimnakao@kyida.jp (for immunity contents)	
Exams/Results Evaluation Method	1. Attendance and class participation/activities: 20% 2. Written report: 30% 3. Final exam: 50%	
Others		