

A Master Course	Class Style	Lecture	FB : Elective 1 credits AM : Elective 1 credits GM : Elective 1 credits	Fiscal year	2020
Course Title	Statistical Analysis of Medical and Biological Data	Numbering code	FB : GDMFB1014 AM : GDMAM1010 GM : GMDMGM1012		
Objectives	Learning how to analyze medical and biological data using statistical software (R)				
Semester	The second half of the 1 st Grade (intensive classes in the weekend and winter holidays)				
Location	In the data room of Dept. of Epidemiology and Preventive Medicine, located on the 8 th floor in the second building of Graduate School of Medical and Dental Sciences				
Couse Director	KORIYAMA Chihaya (Department of Epidemiology and Preventive Medicine)				
G I O	Learning basic statistical analysis to conduct biomedical research				
S B O	<p>Students completing the course will be able to</p> <ol style="list-style-type: none"> 1) summarize the data by descriptive statistics value 2) explain the major probability distribution 3) calculate a confidence interval of a population mean with normal distribution 4) conduct statistical tests for continuous variables among groups 5) compute and interpret simple/multiple regression models 6) analyze the data of contingency tables 				
Outline (90 minutes x 15 lectures)				Instructor	
	<p>Using the free statistical software, R, students will learn the following analytical methods:</p> <ol style="list-style-type: none"> 1. Descriptive statistics 2. Drawing of histogram, box-whisker plot, and scatter plot 3. Calculation of a confidence interval of a population mean with normal distribution 4. Comparison of continuous variables among groups 5. Regression analysis using a continuous variable as a dependent variable 6. Nonparametric test 7. Analysis of contingency tables 			KORIYAMA Chihaya	
Teaching Materials	Documents distributed				
Grading Methods	Assignment (50%), attitude (30%), intelligibility (20%)				
Contact	Office hours	After class			
	E-mail	fiy@m.kufm.kagoshima-u.ac.jp			
Others	Please bring your note PC with you.				