Module Code	19349027	Course Term		
Course Subject Name	Plant Production and Physiology	Spring		
Course Tutor	Kazuyuki SAITO,Yushi ISHIBASHI, Takahiko KUBO, Kazuhiro IIYAMA, Kaori SAKAI	The 6th Semester		
Credit	2	Taught Day		
Schools	School of Agriculture			
Taught Year	The 3rd year			
Campus	Ito campus			
Subject Area	Lecture			
Course Subject Classification	Specialized Subjects	Monday, 2nd period (10:30-12:00)		
Course Requirements				
Course Requirement				
(Pre-requisite)				
Course Outline				
Exercises will be done on how	to perform experiments related to plant production and physical sectors and physical sectors and physical sectors and physical sectors are appreciated as the product of the product of the physical sectors are appreciated as the physical sectors a	siology. Throughout this course, there will be a strong emphasis on		
good laboratory practice, data	a handling and problem-solving skills.			
key words				
Plant transformation, Fruit tre	ees, Plant-associated microorganisms, Environmetal stress res	sponse, Dormancy, Plant reproduction.		
Study Objectives (General)				
The course students learn the	e following:			
Laboratory practice in experiments related to plant production and physiology.				
Handling of basic analytical instruments.				
Handling of chemical data & interpreting them.				
Handling of microorganisms.				
Study Objectives (Specific) The course aims to achieve the following:				
1. Students can understand plant transformation methods.				
2. Students can understand fruit production and physiology.				
3. Students can understand microbiology.				
4. Students can understand plant growth under environmental stress.				
5. Students can understand a major mechanism of plant reproductive development.				
Course Plan				
1-3: Plant transformation (Saito)				
4-6: Plant growth regulators in fruit production (Sakai)				
7: What is plant-assosiated microorganisms? lecture on basic microbiology (Iiyama)				
8: Isolation and culture of microorganisms (Lecture & Experiment) (Iiyama)				
9: Classification of microorganism (Lecture & Experiment) (Iiyama)				
10-12: Plant response to environmental stresses (Ishibashi)				
13-15: Plant reproduction (Kubo)				

Course Approaches	

Textdooks		
Reference Books	Plant Physiology, Fifth Edition Fifth Edition by Lincoln Taiz & Eduardo Zeiger , Sinauer Associates, Inc	
Study consultation (office hour)	ksaitou@agr.kyushu-u.ac.jp, yushi@agr.kyushu-u.ac.jp, takubo@agr.kyushu-u.ac.jp, iiyama@grt.kyushu-u.ac.jp, sakai@farm.kyushu-u.ac.jp	
Exams/Results Evaluation Method	 Attitude in the discussion Attendance of the experiment Examination 	
Others		