

Module Code	19349037	Course Term
Course Subject Name	Forest Products Science	Spring
Course Tutor	Atsushi Watanabe et al	The 6th Semester
Credit	2	Taught Day
Schools	School of Agriculture	WED-2
Taught Year	The 3rd year	
Campus	Ito campus	
Subject Area	Lecture	
Course Subject Classification	Specialized Subjects	
Course Requirements		
Course Requirement (Pre-requisite)		
Course Outline		
Course Overview: Students learn a significance of sustainable and environment-friendly forest products use. Student will learn the basics of broad sense of forest resources through class lectures		
key words		
wood science, silviculture, photosynthesis, secondary metabolites, recycle, bioorganic chemistry		
Study Objectives (General)		
Overall Objective: This course is designed to let students understand sustainable and environment-friendly use of forest resources.		
Study Objectives (Specific) The course aims to achieve the following:		
Specific Goals: A. Students can understand the basics of wood science. B. Student can extend the knowledge of genetics, photosynthesis and growth for trees. C. Students can understand the basics of secondary metabolites in woody plants. D. Students will learn the possibility of functional products from forest resources.		
Course Plan		
Course Plan: Tentative Weekly Schedule: 1. Overview of Forest product science (Assoc. Prof. Atsushi Watanabe) 2. Overview of Wood Physics (Assoc. Prof. Masumi Hasegawa) 3. Overview of Wood Mechanics (Assoc. Prof. Masumi Hasegawa) 4. How trees grow (Assoc. Prof. Koichiro Gyokusen) 5. Trees and Water (Assoc. Prof. Koichiro Gyokusen) 6. Forest Genetic Resources (Assoc. Prof. Atsushi Watanabe) 7. Forest Genetics and Breeding (Assoc. Prof. Atsushi Watanabe) 8. Mechanism of Photosynthesis (Assoc. Prof. Michito Tsuyama) 9. Environmental Stress and Photoinhibition of Photosynthesis (Assoc. Prof. Michito Tsuyama) 10. Secondary Metabolites in Woody Plants I (Prof. Yuji Tsutsumi) 11. Secondary Metabolites in Woody Plants II (Assoc. Prof. Koki Fujita) 12. Improvement of Forest Resources for Recyclable Forest Products (Assoc. Prof. Toshihiro Ona) 13. Functional Products from Mushrooms (Assoc. Prof. Kuniyoshi Shimizu) 14. Functional Products from Woods (Assoc. Prof. Kuniyoshi Shimizu) 15. Bioenergy and Bioremediation (Prof. Yuji Tsutsumi)		
Course Approaches		
Textbooks	All learning materials will be provided by the professors.	
Reference Books		
Study consultation (office hour)	Office: Building No. 2 Annex floor 1 Office Hours: 13.00-14.00 every Wednesday (Watanabe and other professors) Email: nabeatsu@agr.kyushu-u.ac.jp Phone: 092-642-2881	
Exams/Results Evaluation Method	Report every time	
Others		