

Module Code	21349055	Course Term
Course Subject Name	Basic Ecology	Autumn
Course Tutor	Yukiko Ogino	The 1st Semester
Credit	2	Taught Day
Schools	School of Agriculture	TUE-3
Taught Year	The 2nd year	
Campus	Ito campus	
Subject Area	Lecture	
Course Subject Classification	Common Basic Subjects	
Course Requirements		Wednesday, 2nd period (10:30-12:00)
Course Requirement (Pre-requisite)	None	
Course Outline		
Students learn the basics of interactions between organisms, their environment, and each other.		
key words		
Ecosystem, environment, organisms, evolution		
Study Objectives (General)		
The goal of this course is to provide students with essential knowledge of ecology and environmental sciences to help understand the interactions that determine the distribution and abundance of organisms and as a foundation toward applying them to solve current environmental problems that affect biodiversity.		
Study Objectives (Specific) The course aims to achieve the following:		
The course aims to achieve the following:		
A. Students learn the various ways organisms interact with their environment.		
B. Students gain an appreciation for the interconnectedness of ecological components and how various factors can have more than one effect.		
C. Students learn the variety of spatial and temporal scales on which ecological phenomena occur.		
D. Students learn how ecological understanding can help us predict, manage, mitigate, and control of resources.		
E. Students learn how competition between organisms influences their abundances and diversity and how humans can influence the environment in positive and negative ways.		
Course Plan		
Tentative Weekly Schedule:		
1-2, Introduction to Ecology, Organisms and their environment		
3. Physical conditions and the availability of resources		
4-5. History of the theory of evolution and the current interpretation about the evolution		
6-7. Basic strategies to study the population dynamics, Intraspecific competition		
8. Evolution within species and speciation		
9-10. Species interactions, Interspecific competition, Biodiversity		
11. Predator-prey dynamics		
12. Ecological disturbance		
13-14. Human impacts on the the natural world and the intensification of agricultures, Approaches of conservation biology		
15. Summary		
Course Approaches	Lecture	
Textbooks	Begon, Townsend, and Harper (2006), Ecology: From Individuals to Ecosystems	
Reference Books	Sadava, Hillis, Heller, Berenbaum (2012) Life;The Science of Biology	
Study consultation (office hour)	Office: room 579, West5, Ito Campus Office Hours: by appointment Email: ogino@agr.kyushu-u.ac.jp Phone: 092-802-4766	
Exams/Results Evaluation Method	1. Attendance, in-class activities and short quizzes (50%) 2. Report (50%)	
Others		