

Module Code	20349041	Course Term	Spring
Course Subject Name	Utilization of Animal and Marine Resource		
Course Tutor	Mitsuhiro Furuse		
Credit	2	Taught Day	THU-1
Schools	School of Agriculture		
Taught Year	The 3rd year		
Campus	Ito campus		
Subject Area	Lecture		
Course Subject Classification	Specialised Subjects		
Course Subject Classification	Specialised Subjects	Thursday, 1st period (8:40-10:10)	
Course Requirements			
Course Requirement (Pre-requisite)			
Course Outline			
From a standpoint of the effective utilization of livestock products, marine products and their biological components, this subject deals with biochemical, physiological and nutritional aspects of these animal bioresources. Students also learn the biotechnological aspects of food processing and preservation with special emphasis on the control of food quality and the utilization of highly functional active substances from these animal bioresources for non-food applications.			
key words			
Food Science, Biochemistry, Animal products, Animal resources, marine bioresources			
Study Objectives (General)			
This course is designed to let students be aware of the need for efficient use of animal bioresources and let them acknowledge the problem.			
Study Objectives (Specific) The course aims to achieve the following:			
Specific Goals:			
A. To give students the fundamental and up-to-date knowledge or technology of animal			
B. To provide students with the necessary terminology to effectively describe animal bioresources and their essential characteristics.			
C. To familiarize students with livestock and marine products.			
D. To make students understand the importance that animal bioresources are useful in developing medicines used to human health including age-related diseases as a non-food.			
Course Plan			
Tentative Weekly Schedule: date			
1. Introduction - Overview of Animal bioresources (Furuse) (May 7)			
2. Food Biochemistry: Proteins (Nakao) (May 14)			
3. Food Biochemistry: Carbohydrates and lipids (Nakao) (May 21)			
4. Food Biochemistry: Nucleic acid, minerals, vitamins (Nakao) (May 28)			
5. Food Biochemistry: Proteins (Tatsumi) (June 4)			
6. Useful substances to improve animal bioresources (Tastumi) (June 11)			
7. Food processing technology of animal products (Tastumi) (June 18)			
8. Nutrition and functionality of animal products (Furuse) (June 25)			
9. Nutrition and functionality of animal products (Furuse) (July 2)			
10. Useful substances produced from animal bioresources (Nakao) (July 9)			
11. Utilization of animal gene resources and genome information (Nagasawa) (July 16)			
12. Useful substances produced from marine bioresources (Okino) (July 23)			
13. Useful substances produced from marine bioresources (Okino) (July 30)			
14. Report (1-13) (August 6)			
Course Approaches			
Textbooks			
Reference Books	Molecular biology of the cell		
Study consultation (office hour)	Office: Room #469 (representative : Furuse) Office Hours: Thursday 16.30-17.30 furuse@brs.kyushu-u.ac.jp 092-802-4598		
Exams/Results Evaluation Method			
Others			