

Module Code	21349056	Course Term
Course Subject Name	Introductory Biochemistry	Autmun
Course Tutor	Yasuaki Hiromasa	The 3rd Semester
Credit	2	Taught Day
Schools	School of Agriculture	Thu-2
Taught Year	The 2nd year	
Campus	Ito campus	
Subject Area	Lecture	
Course Subject Classification	Common Basic Subjects	
Course Requirements	Class attendance, quizz and exams.	
Course Requirement (Pre-requisite)	Basic knowledge in organic chemistry and biology	
Course Outline		
The course provides an introduction to the fundamental principles of biochemistry. Students acquire basic knowledge of biomolecules that make up cells. It covers structures and functions of biologically active compounds including nucleic acid, amino acid, protein, carbohydrates and lipids.		
key words		
Nucleotides, Nucleic Acids, Genetic Information, Amino Acids, Structure & Function of Protein, Carbohydrates, Lipids and Biological Membranes,		
Study Objectives (General)		
The main objectives are to gain a deeper understanding of life science through the study of structure and function of biologically active compounds.		
Study Objectives (Specific) The course aims to achieve the following:		
Course Plan		
class schedule:		
Method: By online (zoom), except exams (Mid & Final exams @ W5-229 rm)		
1. Introduction of the class & Nucleotides, Nucleic Acids, and Genetic Information (Chapter 3)		
2. Nucleotides, Nucleic Acids, and Genetic Information (Chapter 3)		
3. Amino Acids (Chapter 4)		
4/5. Proteins: Primary Structure (Chapter 5)		
6/7. Proteins: Three-Dimensional Structure (Chapter 6)		
8. Mid-term exam		
9/10. Protein Function: Myoglobin and Hemoglobin, Muscle Contraction, and Antibodies (Chapter 7)		
11. Carbohydrates (Chapter 8)		
12. Lipids and Biological Membranes (Chapter 9)		
13/14. Membrane Transport (Chapter 10)		
Course Approaches	Powerpoint & whiteboard. (Online classes may be offered depending on the status of the pandemic of COVID.)	
Textbooks	Principles of Biochemistry, 3rd or 4th edition by Voet, Voet & Pratt. (Wiley inc.)	
Reference Books		
Study consultation (office hour)	Office: W475 Office hours: by appointment email: hiromasr@agr.kyushu-u.ac.jp Tel: 092-802-4765	
Exams/Results Evaluation Method	Attendance, homework, Involvement, report, examination. Successful students must explain the basic molecular chemical structures and functions of proteins, nucleic acids, sugars, and lipids.	
Others		