

Module Code	19349033	Course Term
Course Subject Name	Microbiology	Spring
Course Tutor	Kaoru Takegawa	The 4th Semester
Credit	2	Taught Day
Schools	School of Agriculture	WED-1
Taught Year	The 2nd year	
Campus	Ito campus	
Subject Area	Lecture	
Course Subject Classification	Specialized Subjects	
Course Requirements		
Course Requirement (Pre-requisite)		Wednesday, 1st period (8:40-10:10)

Course Outline

Course Overview:

This course will focus on basic microbiology concepts and their application to biotechnology. At the completion of this course, students will be aware of fundamental microbiological concepts, including procaryotic and eukaryotic characterization, host-microbe interaction, metabolic diversity and microbial ecology.

key words

Biochemistry, Agrochemistry, Biotechnology, Cell Biology

Study Objectives (General)

Overall Objective:

The goal of this course is to provide students with essential knowledge of the various types of microorganisms and the environment in which they exist and interact.

Study Objectives (Specific) The course aims to achieve the following:

Course Plan

Course Plan:

Tentative Weekly Schedule:

- 4/10 Introduction to Microbiology: Kaoru Takegawa, takegawa@agr.kyushu-u.ac.jp
- 4/17 Basics in Microbiology 1 (History and Microscopy): Yujiro Higuchi, y.higuchi@agr.kyushu-u.ac.jp
- 4/24 Basics in Microbiology 2 (Diversity and Identification): Yujiro Higuchi
- 5/8 Basics in Microbiology 3 (Chemical Structure): Katsumi Doi, doi@agr.kyushu-u.ac.jp
- 5/15 Basics in Microbiology 4 (Culture and Growth): Yukihiro Tashiro, tashiro@agr.kyushu-u.ac.jp
- 5/22 Basics in Microbiology 5 (Metabolism): Yukihiro Tashiro
- 5/29 Basics in Microbiology 6 (Molecular Biology and Genetics): Yasuhiro Fujino, fusion@agr.kyushu-u.ac.jp
- 6/5 Phylogeny and General Metabolism of Archea: Yoshizumi Ishino, ishino@agr.kyushu-u.ac.jp
- 6/12 Cell Structure and Biology of Yeasts: Hiromi Maekawa, hmaekawa@agr.kyushu-u.ac.jp
- 6/19 Fungal Physiology and Structure: Yujiro Higuchi
- 6/26 Soil and Environmental Microbiology: Kenji Sakai, kensak@agr.kyushu-u.ac.jp
- 7/3 Microbe and Plant Interactions: Masaru Matsumoto, mmatsu@agr.kyushu-u.ac.jp
- 7/10 Microbe and Insect Interactions: Chisa Aoki, yasunaga@grt.kyushu-u.ac.jp
- 7/17 Industrial Microbiology: Yukihiro Tashiro
- 7/24 Microbiology and Immunology: Miki Nakao, mikimnakao@kyudai.jp

Course Approaches

Lecture

Textbooks

Reference Books

Brock Biology of Microorganisms (Pearson International Edition)

Study consultation

(office hour)

E-mail: takegawa@agr.kyushu-u.ac.jp

Exams/Results

Evaluation Method

1. Attendance, in-class activities and others (50%)
2. Rpoort (50%)

Others