

# Virology

Syllabus Number 5D249  
Special Subjects  
Elective 2 credit  
KAJITANI, Masayuki

## 1. Course Description

In this course, you will learn a small creature called a virus from a molecular biological point of view.

## 2. Course Objectives

By learning this course, you will be able to understand the basic biological image of pathogenic microorganisms of virus from a molecular biological point of view and explain it to others.

## 3. Grading Policy

I will carry out the final exam at the end of the term. In addition, we ask group activities to deepen our understanding of viruses by self-study. For the final grade evaluation, we will add 65 points for the final exams, 35 points for the normal point (report and group activities), and sum it.

## 4. Textbook and Reference

Textbook

This subject does not use textbooks. The lecture is based on original printed teaching materials.

## 5. Requirements(Assignments)

In order to learn contemporary virology, basic knowledge of a wide range of fields such as molecular genetics, biochemistry, and immunology, etc. is necessary. Please review these areas during the summer vacation period before taking the classes.

After group activities by students, we also ask oral presentations. As a general rule, group activities are voluntarily done outside class hours.

## 6. Note

In the first lesson, I will explain more detailed lesson plans and attentions. Students who wish to attend are sure to attend and receive guidance materials of "group activities" to be distributed at that time.

This course is virology as a living thing. Computer viruses are excluded.

## 7. Schedule

- [1] Introduction to virology
- [2] What is virus?
- [3] Virus genes
- [4] Virus infection and proliferation
- [5] Prevention and treatment of viral diseases
- [6] AIDS and HIV (Part 1: Virus and syndromes)
- [7] AIDS and HIV (part 2: Detection kit for anti-HIV antibody)
- [8] Influenza virus (Part 1: Virus and symptom)
- [9] Influenza virus (Part 2: Case study of outbreak)
- [10] Virus and carcinogenesis
- [11] Smallpox virus ~ Battle to eradication
- [12] Emerging & reemerging virus
- [13] Presentation based on outcome of group activities (1)
- [14] Presentation based on outcome of group activities (2)
- [15] Summary and Exam