

96下LS 312200 微生物學 (Microbiology)

Time: M5M6, R5

1. Textbook: Prescott et al., 2008 Microbiology, 7th ed. McGraw Hill

藝軒圖書出版社代理 (02)2367-6824 or (02)2918-2288

2. Lecture notes/materials: go to E-learning system

3. Instructor: Mou-Chieh Kao (高茂傑) mckao@life.nthu.edu.tw LS-I 307 ext. 42472

Chung-Yu Lan (藍忠昱) cylan@life.nthu.edu.tw LS-I 405 ext. 42473

Hsien-Sheng Yin (殷獻生) hsyin@life.nthu.edu.tw LS-II320 ext. 42469

4. Teaching assistant: 曹長治 LS-I 404 ext. 33468

5. TA office hours: By appointment only

6. Course description:

This is a course of introductory level, which intends to give a general overview of modern microbiology. Medical and molecular aspects of microbiology will be specifically emphasized. The class will be taught by giving lectures following the outlines of the textbook.

7. Grading

90% three in-class written examinations

10% participation (quiz, absence): Students with 3 absences from the class (without notice in advance) will completely lose the score of this part.

8. Syllabus

Week	Date	Topics (chapter)	Instructor
1	2/18 2/21	Introduction: the history and scope of microbiology (1) The study of microbial structure: microscopy and specimen preparation (2)	Kao
2	2/25 2/28	Prokaryotic and eukaryotic structures and function (3 & 4) 和平紀念日 停課一天	Kao
3	3/3 3/6	Microbial nutrition (5) Microbial growth (6)	Kao
4	3/10 3/13	Control of microorganisms (7) Microbial metabolism (8 & 9)	Kao
5	3/17 3/20	Microbial metabolism (10) & Microbial genetics (11) Microbial genetics (11 & 12)	Kao
6	3/24 3/27	Examination I Microbial genomics (15)	Kao Lan
7	3/31 4/3	Microbial evolution, taxonomy and diversity (19) 民族掃墓節及校際活動週 停課一天	Lan
8	4/7 4/10	Bacteria: The Deinococci, Nonproteobacteria Gram Negative and Proteobacteria (21, 22) Pathogenicity of microorganisms (33)	Lan

9	4/14 4/17	Bacteria: the low and high G+C gram positives (23 & 24)	Lan
10	4/21 4/24	Human diseases caused by bacteria (39) The protists (25)	Lan
11	4/28 5/1	The fungi (27) Human diseases caused by fungi and protists (39)	Lan
12	5/5 5/8	Examination II The viruses: introduction and general characteristics (16)	Lan Yin
13	5/12 5/15	Bacterial, archaeal and eukaryotic viruses & other acellular infectious agents (17, 18) (17, 18)	Yin
14	5/19 5/22	(17, 18) Human diseases caused by viruses and prions (37)	Yin
15	5/26 5/29	Clinical microbiology and immunology (35) Nonspecific (innate) host resistance (31)	Yin
16	6/2 6/5	Nonspecific (innate) host resistance (31) Specific (adaptive) immunity (32)	Yin
17	6/9 6/12	Specific (adaptive) immunity (32) The epidemiology of infectious disease (36)	Yin
18	6/16	Final examination	Yin