

## Course Syllabus for General Microbiology (SCBE210)

Credi: 3(2-3-5)

Lecture Time: Fridays 13:00-15.00 o'clock (SC1-161)

Lecturer: Pahol Kosiyachinda

Google class code: bjhywsl4

Class materials: <https://classroom.google.com/c/ODM1ODY0ODIyNjM3?cjc=bjhywsl4>

Required textbook: Willey J., Sandman K., and Wood D., Prescott's Microbiology. 12<sup>th</sup> Ed.

McGraw-Hill; New York, USA. 2023.

Date	Topic	Assignment
9 Jan	Biochemistry of cell and cell structure	Chapter 1-5
16 Jan	Sub-cellular organisms and infectious particles	Chapter 6 & 25
23 Jan	Dynamics of microbial growth and its requirement	Chapter 7-8
30 Jan	Microbial metabolism	Chapter 10
6 Feb	Identification and classification of microorganisms	Chapter 10
13 Feb	Bacteria and archaea (Make-up: 13:00-15:00)	Chapter 19-22
20 Feb	Eukaryotic microorganisms (unicellular)	Chapter 23-24
27 Feb	Eukaryotic microorganisms (multicellular)	Chapter 23-24
6 Mar	<i>Midterm Examination</i>	Chapter 12
13 Mar	Microbes in ecosystems	Chapter 27
20 Mar	Microbial interactions	Chapter 28
27 Mar	Microbe-human ecosystem: Infection and pathogenicity	Chapter 33-34
3 Apr	Epidemiology	Chapter 35
10 Apr	Clinical microbiology and immunology	Chapter 36
17 Apr	Human diseases	Chapter 37-39
24 Apr	Applications of microbiology	Chapter 40-42
1 May	Final Examination	Chapter 29

**Course Syllabus for General Microbiology (SCBE210)**

Credit: 3(2-3-5)

Google class code: khx3z3w

Laboratory Time: Fridays 15:00-18:00 o'clock (SC3-300)

Lecturer: Pahol Kosiyachinda

Date	Topic
9 Jan	Lab safety and orientation
16 Jan	Aseptic technique
23 Jan	Medium preparation
30 Jan	Colony morphology and form of growth
6 Feb	Physical factors affecting growth and control
13 Feb	Staining
20 Feb	Dilutions and quantification methods
27 Feb	Isolation methods & contamination
6 Mar	Midterm Examination
13 Mar	Biochemical analysis 1
20 Mar	Biochemical analysis 2
27 Mar	Biomass measurements
3 Apr	Sampling methods
10 Apr	Antibiotic testing 1
17 Apr	Antibiotic testing 2
24 Apr	Water microbiology & soil microbiology
1 May	Final Examination

**Laboratory technician:**

Ms. Suchada Geawduanglek from MDL

**Evaluation**

TQF	Evaluation Method	Week	Proportion
1	- Participation/Activities - Attendance/Attention	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	30 %
2	- Laboratory	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	30%
3	- Midterm Examination	1, 2, 3, 4, 5, 6, 7, 8	20 %
4	- Final Examination	9, 10, 11, 12, 13, 14, 15, 16	20 %