

# Epidemiology I

Code: 31-3302      1st year      2units  
Course ID: GP-b3302L

## 1. Instructor(s)

Nobutoshi Nawa, Associate Professor, Department of Global Health Promotion  
Takeo Fujiwara, Professor, Department of Global Health Promotion  
Hisaaki Nishimura, Assistant Professor, Department of Global Health Promotion  
Yu Par Khin, Specially Appointed Assistant Professor, Department of Global Health Promotion

## 2. Classroom/Lab

Next Page

## 3. Course Purpose and Outline

### Course Purpose

This course introduces the principles and methods used in epidemiologic research.

### Outline

This course is a lesson to learn the basics of the Clinical Statistics and Bioinformatics Graduate Program of the Integrative Biomedical Sciences Programs for Preemptive Medicine aiming at the training of personnel who can promote precision medicine.

Epidemiology is defined as the study of the causes and distribution of health-related states or events in specified populations, and the application of this knowledge to control those health problems. Throughout the course we will focus on conceptual and practical issues in the design, conduct, and analysis of epidemiologic studies for description and causal inference.

## 4. Course Objective(s)

By the end of this course, students will be able to:

- a) Measure disease for behavior
- b) Appraise published paper critically
- c) Write reviewer comments
- d) Design epidemiological study to address public health issue

## 5. Format

This course will consist of lectures and case-based class activities. Students will be required to write a final report.

## 6. Course Description and Timetable

Next Page

## 7. Grading System

Grades will be based on the following elements:

1. Attendance 10%
2. Group Presentation A (sampling and measurement) 20%
3. Group Presentation B (public health action/research proposal) 30%
4. Exam (critical appraisal) 40%

## 8. Prerequisite Reading

Reading materials will be available online at the course webpage. Students are expected to have worked through the materials before attending the corresponding class.

## 9. Reference Materials

Gordis L. Epidemiology: with student consult. 5th edition. Philadelphia: Elsevier; 2013  
Szklo M, Nieto EJ, Epidemiology: Beyond the Basics. 3rd edition, Jones & Bartlett Learning; 2012.  
Rothman KJ, Greenland S, Lash T. Modern Epidemiology. LWW; 2012.

### 1 0. Important Course Requirements

For students not in the MPH course, instructor's permission is required before registering to the course. Also, students are required to have TOEFL iBT with a minimum score of 80 or IELTS with a minimum score of 6.5.

### 1 1. Availability in English

All classes are taught in English.

### 1 2. Office hours

Please contact Dr. Nawa (nawa.hlth@tmd.ac.jp)

### 1 3. Note(s) to students

This course is a prerequisite for Epidemiology II. Please bring your laptop for group works and exam.

#### Schedule

No	Day	Time	Topics / Venue	Instructor	
1	June 24, 2024	8:50-10:20	<u>Lecture</u> : Measurement and Sampling (G-Lab, M&D Tower 8F)	Nobutoshi Nawa Takeo Fujiwara	
2		10:30-12:00			
3		13:00-14:30			
4		14:40-16:10	<u>Group work A (field work and group presentation)</u> : Measurement and Sampling (G-Lab, M&D Tower 8F)		Takeo Fujiwara Nobutoshi Nawa Hisaki Nishimura Yu Par Khin
5	June 25, 2024	8:50-10:20	<u>Lecture</u> : Study designs and Confounder (G-Lab, M&D Tower 8F)	Nobutoshi Nawa Takeo Fujiwara	
6		10:30-12:00			
7		13:00-14:30			
8		14:40-16:10	<u>Group discussion</u> : Critical Appraisal (G-Lab, M&D Tower 8F) *Download Yamaoka (2015) from WebClass and read in advance		Takeo Fujiwara Nobutoshi Nawa Hisaki Nishimura Yu Par Khin
9	June 27, 2024	8:50-10:20	<u>Exam</u> : Writing a Review Comment (G-Lab, M&D Tower 8F)	Takeo Fujiwara Nobutoshi Nawa Hisaki Nishimura Yu Par Khin	
10		10:30-12:00	<u>Comments on answers</u> : Writing a Review Comment (G-Lab, M&D Tower 8F)		
11		13:00-14:30	<u>Group work B (preparation)</u> : Drafting a Research Proposal for a Public Health Issue (G-Lab, M&D Tower 8F)		Takeo Fujiwara Nobutoshi Nawa Hisaki Nishimura Yu Par Khin
12		14:40-16:10			
13	June 28, 2024	8:50-10:20	<u>Lecture</u> : Advanced Epidemiology to Apply for the Real World (G-Lab, M&D Tower 8F)	Nobutoshi Nawa Takeo Fujiwara	
14		10:30-12:00			
15		13:00-14:30	<u>Group work B (group presentation)</u> : Drafting a Research Proposal for a Public Health Issue (G-Lab, M&D Tower 8F)		Takeo Fujiwara Nobutoshi Nawa Hisaki Nishimura Yu Par Khin
16		14:40-16:10			