

Epidemiology II

Code: 31-3303 1st year 2units
Course ID: GP-b3303L

1. Instructor(s)

Jun Aida, Professor, Department of Oral Health Promotion
Takeo Fujiwara, Professor, Department of Global Health Promotion
Ichiro Kawachi, John L. Loeb and Frances Lehman Loeb Professor of Social Epidemiology, Chair,
Department of Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health
Naoki Kondo, Professor, Department of Social Epidemiology, Kyoto University
Fumiaki Imamura, Senior Investigator Scientist, MRC Epidemiology Unit, Institute of Metabolic
Science, University of Cambridge School of Clinical Medicine

2. Classroom/Lab

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3. Course Purpose and Outline

Course Purpose

This course applies advanced epidemiological methodologies to explore the health effects of major social variables.

Outline

We will focus on social determinants of health, including social class, race, gender, poverty, income distribution, social networks/support, community cohesion, work and neighborhood environment, and behavioral economics. We also address the health consequences of social and economic policies, and the potential role of specific social interventions, including innovative methods based on behavioral economics. To deepen understanding of social epidemiology, oral health outcomes, their distributions in the populations, and its common determinants will be taught. Lectures by Professor Ichiro Kawachi from Harvard T.H. Chan School of Public Health form part of the Harvard/Johns Hopkins Lecture Series (HJLS).

4. Course Objective(s)

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

- a) Define social determinant of health, explain measurement methods of them, and describe mechanisms through which social determinant of health influence health.
- b) Explain high risk and population strategies of prevention, and contrast benefit and drawbacks of two strategies.
- c) Explain oral health outcome measurements, its distribution and common determinants of oral health.
- d) Explain how can we incorporate novel insights from behavioral economics to improve the success of behavior change.

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

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7. Grading System

Grades will be based on the following elements:

- Participation 20%
- Presentations 30%
- Final paper 50%

8. Prerequisite Reading

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

9. Reference Materials

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

The book is recommended for those whose research interests are related to social determinants of health.

Berkman LF, Kawachi I, Glymour MM, editor. Social Epidemiology. 2nd ed. New York: Oxford University Press; 2014.

10. Important Course Requirements

For students not in the MPH course, instructor's permission is required before registering to the course. Prerequisite: Epidemiology I or the equivalent.

11. Availability in English

All classes are taught in English.

12. Office hours

Please contact Prof. Aida at aida.ohp@tmd.ac.jp

13. Note(s) to students

Prerequisite: Epidemiology I or the equivalent

An explanation of the assignment will be given in Lecture 2.

Schedule

No	Day	Time	Topics / Venue	Instructor
1	November 8, 2024	8:50-10:20	<u>Lecture: Oral Epidemiology (1)</u> (G-Lab, M&D Tower 8F / Onsite. Live)	Jun Aida
2		10:30-12:00		Jun Aida
3		13:00-14:30	Lecture: Socioeconomic status and health (G-Lab / Uploaded on webclass)	Naoki Kondo
4		14:40-16:10	Q & A session : Socioeconomic status and health (G-Lab, M&D Tower 8F / Onsite. Live)	Naoki Kondo Jun Aida
5	November 11, 2024	8:50-10:20		Takeo Fujiwara, Ichiro Kawachi, Jun Aida
6		10:30-12:00	<u>Epidemiology activity: Adachi visit</u>	Takeo Fujiwara, Ichiro Kawachi, Jun Aida
7		13:00-14:30		Takeo Fujiwara, Ichiro Kawachi, Jun Aida
8	November 12, 2024	8:50-10:50	<u>Lecture: Application of behavioral economics to improve health</u> (Ondemand: uploaded on webclass)	Ichiro Kawachi
9		10:30-12:00	<u>Lecture: Life-course epidemiology</u> (G-Lab, M&D Tower 8F / Onsite. Live)	Takeo Fujiwara
10		13:00-14:30	<u>Lecture: Application of behavioral economics to improve health</u> (G-Lab, M&D Tower 8F / Onsite. Live)	Ichiro Kawachi
11		14:40-16:10	Lecture: Nutritional Epidemiology (1) (G-Lab, M&D Tower 8F /Onsite. Zoom Live)	Fumiaki Imamura Jun Aida
12	November 14, 2024	8:50-10:50	Case and group activity: Preparation for the final exam (G-Lab, M&D Tower 8F / Onsite. Live)	Jun Aida
13		10:30-12:00	<u>Case and group activity:</u>	
14		13:00-14:30	Final exam presentation. (G-Lab, M&D Tower 8F / Onsite. Live)	
15		14:40-16:10	<u>Lecture: Nutritional Epidemiology (2)</u> (G-Lab, M&D Tower 8F /Onsite. Zoom Live)	Fumiaki Imamura Jun Aida