

Epidemiology

(Code: 4811 1st – 2nd year, 2 units)
(Course ID: GS-c4811-L)

1. Instructors

Name	Position	Department	Contact Information
NAWA Nobutoshi	Chief Instructor / Professor	Department of Global Health Entrepreneurship	nawa.ioe@tmd.ac.jp
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2. Classroom/Lab Lecture Location

G-Lab, M&D Tower 8F

3. Course purpose and Outline

Course Purpose

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.

Outline

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 Objectives

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

- Measure disease for behavior
- Appraise published paper critically
- Write reviewer comments
- Designing 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 Details

No.	Topics
1	Lecture: Measurement and Sampling (1)
2	Lecture: Measurement and Sampling (2)
3	Lecture: Measurement and Sampling (3)
4	Group work A (field work and presentation): Measurement and Sampling
5	Study designs and Confounder(1)
6	Study designs and Confounder(2)
7	Study designs and Confounder(3)
8	Group discussion: Critical Appraisal
9	Exam: Writing a Review Comment
10	Comments on answers: Writing a Review Comment
11	Group work B (preparation): Drafting a Research Proposal for a Public Health Issue (1)
12	Group work B (preparation): Drafting a Research Proposal for a Public Health Issue (2)
13	Lecture: Advanced Epidemiology to Apply for the Real World (1)
14	Lecture: Advanced Epidemiology to Apply for the Real World (2)
15	Group work B (group presentation): Drafting a Research Proposal for a Public Health Issue (1)
16	Group work B (group presentation): Drafting a Research Proposal for a Public Health Issue (2)

7. Assessment

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

10. Language Used

All classes are conducted in English.

11. Office Hours

Mon – Fri: 9:00 AM – 17:00 PM

Contact: NAWA Nobutoshi, Department of Global Health Entrepreneurship

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Please contact the instructor regarding questions or consultations.

12. Note(s) to Students

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.

Please bring your laptop for group works and exam.