

Course Name	Epidemiology
Course Number	OATHF31
Credits	2.0 Credits
Adaptation years	1, 2 Year
Class hold days	FallAB Tue3,4
Instructor	Yukiko Wagatsuma, Masao Iwagami
Overview	The fundamental concepts and uses of epidemiology, and its role in formulating principles, are examined. The uses of information science and statistics in epidemiological and clinical researches are studied, and the role that these fields can play in EBM (Evidence-Based Medicine) are also examined. Exercises are conducted in which epidemiological methods are utilized, to promote understanding of the practice of this discipline.
Remarks	Lectures are conducted in English. face-to-face
Course Type	lectures
Relation to Degree	Generic competence: Knowledge application
Program Competences	Specific competence: Public health core 1: Epidemiology
Course Objectives (Learning Outcomes)	Upon completion of this course, students will be able to explain about the significances of epidemiologic studies in relation to their objectives, methodology and analysis results.
Class Schedule	The course will be offered by onsite (classroom teaching). 1. Oct 3, Period 3; Designing the study (lecture) 2. Oct 3, Period 4; Designing the study (exercise) 3. Oct 10, Period 3; Research question (lecture) 4. Oct 10, Period 4; Research question (exercise) 5. Oct 17, Period 3; Sampling and recruitment (lecture) 6. Oct 17, Period 4; Sampling and recruitment (exercise) 7. Oct 24, Period 3; Measurements: precision and accuracy (lecture) 8. Oct 24, Period 4; Measurements: precision and accuracy (exercise) 9. Oct 31, Period 3; Sample size and power (lecture) 10. Oct 31, Period 4; Sample size and power (exercise) 11. Nov 14, Period 3; Cancer epidemiology (lecture) 12. Nov 14, Period 4; Cancer epidemiology (exercise) 13. Nov 21, Period 3; Designing a cohort study (lecture) 14. Nov 21, Period 4; Designing a cohort study (exercise) 15. Dec 5, Period 3; Designing a case-control study (lecture) 16. Dec 5, Period 4; Designing a case-control study (exercise) 17. Dec 12, Period 3; Designing a randomized trial (lecture) 18. Dec 12, Period 4; Designing a randomized trial (exercise) 19. Dec 19, Period 3; Designing questionnaires and interviews (lecture) 20. Dec 19, Period 4; Designing questionnaires and interviews (exercise)
Course Prerequisites	"OATHA11 Introduction to Epidemiology" is a prerequisite.
Grading Philosophy	Evaluated by the final examination (70%) and research protocol (30%).
Course Hours Breakdown and Out-of- Class Learning	Lectures 50%, exercises 50%. Students should prepare for the classes by reading relevant chapters of the textbook.

Textbooks, References, and Supplementary Materials	1. Stephen B. Hulley et al., Designing clinical research, 4th edition, Lippincott Williams & Wilkins, 2013.
Office Hours and Contact Information	Yukiko Wagatsuma 随時、メールにて事前連絡 ywagats at md.tsukuba.ac.jp
Other (Behavioral expectations and points to note for students during coursework)	
Relation to Other Courses	OATHA11 Introduction to Epidemiology
Teaching Fellow and/or Teaching Assistant	TA (1 person)
Course Keywords	Epidemiology, research design, research protocol