

Category (科目区分)	Specialized subjects / Social Medicine		
Course Title (授業科目名)	Clinical epidemiology and its practice		
Instructors (担当者名)	Kyoko Nomura	Academic Year (配当年次)	1st and 2nd
Required Course / Elective Course (必修/選択)	Elective Course	Credits (単位数)	2
Class Format (授業形態)	Webclass (on demand)		
Schedule (開講期間)	Late April 2025 – January 31, 2026		
Class Date/Period (開講曜日・時間)	Every 4th Wednesday of the month, 13:30–15:00		
Course Outline/ Course Objectives (授業の概要・到達目標)			
<p>Purpose of the class: To learn the necessary knowledge in the general process of setting problems and problems in clinical settings and research planning in an interactive format.</p> <p>Course Objectives: The goal is to learn how to set the research hypothesis, search the literature, select statistical models according to the hypothesis, how to make a data set, estimate the sample size, and write a research plan.</p> <p>This lecture will cover how to formulate a hypothesis, how to perform a literature search, how to set up keywords, how to look up mesh, and how to formulate literature search terms, focusing on PubMed, in order to verify causal relationships in epidemiological studies using statistical methods. Next, we will review how to write a paper and which statistical methods to choose for hypothesis testing. Finally, survival analysis, a commonly used method in clinical epidemiology studies, will be explained. After that, we will show how to create an actual dataset, give a brief demonstration of various statistical software (Stata, Python, SAS, etc.), and learn about the features of each statistical software. Finally, the lecture will introduce three areas of epidemiological research in clinical practice.</p>			
Course Planning (授業計画)			
	Course Outline/ Course Objectives (授業の概要及び到達目標) (Contents of Class) (授業内容)	Instructor (担当教員名)	Department (講座名) Class Room [実施場所]
1	Basic Approach to Clinical Epidemiological Research	Kyoko Nomura (Professor)	Department of Environmental Health Science and Public Health, Akita University Graduate School of Medicine [WebClass]
2	How to perform a literature search		
3	How to write a research paper		
4	How to choose statistical analyses		
5	Survival analysis		
6	How to create a data set and write a research plan		
7	Selection of study design		
8	An example of epidemiological research in clinical practice (1)		
9	An example of epidemiological research in clinical practice (2)		
10	An example of epidemiological research in clinical practice (3)		
Grading Criteria (成績評価の基準と方法)			
The lecture in WebClass is 30 hours + self-study 15 hours, and the evaluation is carried out based on the half participation on webclass.			
Contact Information (問い合わせ先(氏名, メールアドレス等))			
Name: Kyoko Nomura / E-mail: knomura@med.akita-u.ac.jp			
Comment (その他特記事項)			
Information on course: We will provide on-site English lectures if the number of participants will be three or more.			