

Course Name	Systematic Reviews and Introduction to Meta-analysis
Course Number	OATHA17
Credits	2.0 Credits
Adaptation years	1 Year
Class hold days	FallAB Mon2,3
Instructor	Ganchimeg Togoobaatar
Overview	Systematic reviews and meta-analyses are useful for decision-making as well as evidence-based clinical and public health practice. This course will provide a detailed description of the systematic review process, discuss the strengths and limitations of the method, and provide step-by-step guidance on how to perform a systematic review and meta-analysis. Specific topics to be covered include: formulation of the review question, searching of literature, quality assessment of studies, data extraction, meta-analytic methods, assessment of heterogeneity and report writing. RevMan statistical software will be used to perform meta-analysis during the computer lab, along with tutorials on how to effectively use tools such as PubMed for conducting reviews.
Remarks	Lectures are conducted in English.
Course Type	lectures
Relation to Degree Program Competences	Knowledge Application Competence, Epidemiology
Course Objectives (Learning Outcomes)	Systematic reviews and meta-analyses are useful for decision-making as well as evidence-based clinical and public health practice. This course will provide a detailed description of the systematic review process, discuss the strengths and limitations of the method, and provide step-by-step guidance on how to perform a systematic review and meta-analysis. RevMan statistical software will be used to perform meta-analysis during the computer lab, along with tutorials on how to effectively use tools such as PubMed for conducting reviews.
Class Schedule	Lectures will be given online (synchronous) as well as in the classroom (face-to-face). Please contact the course coordinator (ganchimeg-t@md.tsukuba.ac.jp) upon registration for further information on how to take this course. 1. Oct 2, Mon 2-3rd period: Introduction an overview of systematic reviews 2. Oct 16, Mon 2-3rd period: Defining the research question 3. Oct 23, Mon 2-3rd period: Developing a systematic review protocol, RevMan software 4. Oct 30, Mon 1-2nd period: Literature search techniques and strategy 5. Nov 7, Tues 2-3rd period: Selection and screening of studies 6. Nov 13, Mon 2-3rd period: Evaluating the quality of studies 7. Nov 20, Mon 1-2nd period: Data extraction and synthesis 8. Dec 4, Mon 2-3rd period: Introduction to meta-analysis 9. Dec 11, Mon 2-3rd period: Interpreting the evidence 10. Dec 18, Mon 2-3rd period: Presenting results
Course Prerequisites	
Grading Philosophy	More than 70% of attendance is required to earn credit. Participation (60%): Active contribution to the discussion, sharing ideas and insights, is critical to the success of project-centred methods training. Coursework assignments (20%): Homework assignments include

Grading Philosophy	interaction/responses to classmates taken from topics covered in class Research project presentation (20%): The complete project is presented with scholarly
Course Hours Breakdown and Out-of-Class Learning	Coursework assignments have to be done before/after the class, as instructed.
Textbooks, References, and Supplementary Materials	1. Cochrane Handbook for Systematic Reviews of Interventions 5.1.1. Available online at: http://handbook.cochrane.org/ 2. Boland A, Cherry G.M and Dickson R. Doing a systematic review: A student' s guide (2014). 3. Introduction to Evidence based Public Health. Available online at: http://ebph.ihrp.uic.edu/
Office Hours and Contact Information	Ganchimeg Togoobaatar ganchimeg-t@md.tsukuba.ac.jp ganchimeg-t at md.tsukuba.ac.jp
Other (Behavioral expectations and points to note for students during coursework)	
Relation to Other Courses	
Teaching Fellow and/or Teaching Assistant	
Course Keywords	Systematic review, literature review, meta-analysis, Cochrane library, health science