

Course Name	Critical Appraisal in Quantitative Health and Social Sciences Research
Course Number	OATHA16
Credits	1.0 Credits
Adaptation years	1 Year
Class hold days	SprC Fri3,4
Instructor	Ganchimeg Togoobaatar
Overview	The course will provide students with experience in critically appraising a range of research methods and familiarize them with a variety of bio-statistic approaches. Students will use a variety of frameworks to critically appraise literature from their chosen field of study and examine and discuss the implications for evidence-based practice.
Remarks	Lectures are conducted in English.
Course Type	lectures
Relation to Degree Program Competences	Knowledge Application Competence, Epidemiology
Course Objectives (Learning Outcomes)	The course will provide students with experience in critically appraising a range of research methods and familiarize them with a variety of biostatistical approaches. Students will use a variety of frameworks to critically appraise literature from their chosen field of study and examine and discuss the implications for evidence-based practice.
Class Schedule	<p>Lectures will be given online (synchronous) and in classroom 4F 305 (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.</p> <p>1. July 7, 3-4th period Introduction to levels of evidence and quantitative research Frameworks for critical appraisal</p> <p>2. July 14, 3-4th period Concepts of bias and confounding Critical appraisal of randomized controlled trials</p> <p>3. July 21, 3-4th period Critical appraisal of cohort studies Student team work: presentation and discussion I</p> <p>4. July 28, 3-4th period Critical appraisal of cross-sectional studies Critical appraisal of case-control studies</p> <p>5. August 4, 3-4th period Critical appraisal of systematic review Student teamwork: presentation and discussion II</p>
Course Prerequisites	Coursework assignments have to be done before/after the class, as instructed.
Grading Philosophy	More than 70% attendance is required to earn the credit.
Course Hours Breakdown and Out-of-Class Learning	<p>Participation (70%): Active contribution to discussion, sharing ideas and insights, is critical to the success of project-centered methods training.</p> <p>Coursework assignments (30%): Homework assignments include interaction/responses to classmates taken from topics covered in class</p>

Textbooks, References, and Supplementary Materials	<ol style="list-style-type: none"> 1. Mark Elwood. Critical Appraisal of Epidemiological Studies and Clinical Trials. 3rd Edition. 2. Leslie Gross Portney and Mary P. Watkins. Foundations of Clinical Research: Applications to Practice, 3rd edition.
Office Hours and Contact Information	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	Quantitative research, study designs, public health research, critical appraisal