

Systematic Reviews and Evidence Synthesis

Facilitators

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Description

A systematic review (SR) is a review of the scientific literature on a specific research question that adopts explicit and standardized methods to minimize potential biases and thus provide more reliable findings to support decision-making and to guide future research. It is a key element for evidence-based medicine and public health (EBM&PH). Our course is designed for PhD students and researchers who want to know how SRs can be used within healthcare and public health to inform decisions making within an EBM&PH framework.

The participants will learn how to conduct a SR and synthesize evidence (meta-analysis; MA) and the process from the initial research question to best practice reporting results. They will apply different statistical methods and tools to conduct SR and MA (risk of bias tool to assess the methodological quality of studies; meta-analytic methods to quantitatively summarize evidence; GRADE framework to assess the confidence in the MA results). The participants will be trained in appraising SRs, with examples taken from experimental and observational research.

Objectives

To know the principles of EBM&PH and how to conduct a SR and MA.

In particular, able to:

- Understand what is EBM&PH and why it matters for healthcare provision and public health decision making
- Recognize the different types of reviews (systematic, narrative, scoping, ...) and know their strengths and limitations for decision making

- Describe the key steps in undertaking a SR and evidence synthesis, including the development of a protocol
- Formulate a clear research question that can be addressed by a SR
- Identifying the relevant literature
- Appraise the methodological quality of studies included in a SR
- Conduct basic MA and interpret the results
- Assess the confidence in the evidence from MA using the GRADE framework

Dates 10 – 13 February 2025

Eligibility SSPH+ PhD students. External participants are welcome to apply.

Course Structure Lectures and group work

Assessment In-class assignments and presentations

Credits 2 ECTS

Preliminary Work: 10h; Contact time: 30h; Assignment: 10h

(1 ECTS corresponds to appr. 25-30 hours workload)

Location University of Fribourg, room TBA

Course Fees

IGC course fees	2 ECTS
SSPH+ IGC PhD and MD Students	30 CHF
Postdocs from SSPH+ partner institutes	30 CHF
External PhD students, external MD Students and Swiss Public Health Doctors in training	600 CHF
Others	1'600 CHF

Registration <https://www.conftool.com/ssph-phd-courses2025/>

Deadline for registration 10 January 2025