

# Systematic Reviews and Evidence Synthesis

## Facilitators

### **Prof. Dr. Arnaud Chiolerio, MD PhD**

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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 and the process from the initial research question to best practice reporting results. They will apply statistical methods and tools to conduct SR and meta-analysis (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 results). Examples will be 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 review and know their strengths and limitations for decision making

- Describe the key steps in undertaking a SR and evidence synthesis, including development of a review protocol
- Formulate a clear research question that can be addressed by a SR
- Identify 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 using the GRADE framework

### Dates

**16 – 19 February 2026**

### Eligibility

SSPH+ IGC 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

	<b>2 ECTS</b>
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-courses2026/>

### Deadline for registration

16 January 2026