

## How to develop the protocol of your systematic review and register it in the International Prospective Register of Systematic Reviews (PROSPERO)? – Course equivalent to a tutorial–

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| <b>Organizer</b>                  | Prof. Guseva Canu,<br>UNIL, Unisanté, Department of Occupational and Environmental Health                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>1 ECTS</b>                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Summary</b>                    | <p>A systematic review is a rigorous and comprehensive research methodology that involves a structured and systematic approach to collecting, analyzing, and synthesizing existing research evidence on a specific research question or topic. Systematic reviews are highly valuable because their rigorous approach minimizes biases, enhancing the credibility of the findings. Systematic reviews are used to inform public policy decisions and evidence-based clinical practice guidelines. Systematic reviews contribute to transparency and accountability in research and decision-making processes.</p> <p>Developing a systematic review protocol is a crucial step in conducting a rigorous and transparent systematic review. A well-structured protocol ensures that your review is conducted in a systematic and standardized manner, minimizing bias and providing a clear roadmap for the entire review process. The registration of the systematic review protocol in PROSPERO (International Prospective Register of Systematic Reviews) is important because it enhances transparency, prevents duplication, improves the quality of reviews, holds researchers accountable for their methods, and facilitates the dissemination of findings. It is a valuable step in ensuring that systematic reviews are conducted with rigor and integrity, ultimately benefiting evidence-based decision-making and research.</p> <p>In this course the students will learn what is a systematic review and how it differs from the others forms of literature review. The students will discover and apply a step-by-step approach while developing their own systematic review protocol. Finally the students will learn how to use PROSPERO for consultation, registration and update of their protocols until the publication of their review results. At the end of this course, the students will be able to write their own systematic review protocol and manage it registration and update in PROSPERO.</p> |
| <b>Course level</b>               | Introductory/intermediate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Pre-requirements</b>           | Reading materials: Munn et al. BMC Medical Research Methodology (2018) 18:5 DOI 10.1186/s12874-017-0468-4 <a href="https://doi.org/10.1186/s12874-017-0468-4">What kind of systematic review should I conduct? A proposed typology and guidance for systematic reviewers in the medical and health sciences   BMC Medical Research Methodology   Full Text (biomedcentral.com)</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Content of course sessions</b> | <p>Session 1: Introductory presentation on the topics as follows:</p> <ul style="list-style-type: none"><li>• What is a systematic review and how it differs from the other reviews?</li><li>• What are the main steps in a systematic review conduct?</li><li>• What are the main components of the systematic review protocol?</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

- How to use International Prospective Register of Systematic Reviews (PROSPERO)
- How to write and format the review protocol for registration in PROSPERO

Students' choice of research topic and question to be answered by a systematic review method. *Students will be invited to briefly present their research topics and depending on the complexity of their research question, decide on which date they will present their protocol to their colleagues.*

Sessions 2-5: Presentation of the research question and protocol of the systematic review to address it (Students' presentation of the results of their research, with 2-3 presentations per session)

Session 6 : Students' presentation / Conclusions/ Course appraisal

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| <b>Course materials</b> | <ul style="list-style-type: none"> <li>- go to "<a href="https://moodle2.unil.ch">https://moodle2.unil.ch</a>"</li> <li>- log in with your institutional address (unil, chuv, epfl)</li> <li>- click on "<a href="#">Faculté de Biologie et de Médecine</a>" &gt; "<a href="#">Ecole doctorale / doctoral school</a>" &gt; "<a href="#">Lemanic Neuroscience Doctoral School</a>"</li> <li>- course materials and papers will be stored under "SystematicReviewsPROSPERO"</li> </ul>                    |
| <b>Location</b>         | <p>Life Streaming via <b>Microsoft Teams meeting</b> (link will be communicated to participants before course start)</p> <p>Please keep your camera on as the course targets interactions, and you will be asked questions throughout the course!</p>                                                                                                                                                                                                                                                   |
| <b>Course dates</b>     | <b>6 sessions: Wednesday Oct 14, Oct 28, Nov 4, Nov 11, Nov 18, and Nov 25 from 3 to 5 PM</b>                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Evaluation</b>       | <p>The assessment will mainly be based on students' understanding of the systematic review methodology and guidelines on protocol development and PROSPERO use. Students will be invited to develop their own protocol, format it according to the PROSPERO requirements and present to their colleagues. Students are expected to question their pairs during and after the presentation, enabling active participation. Participants are requested to attend at least 80% of the course sessions.</p> |
| <b>Registration</b>     | <p>The course is limited to 16 participants. Register before October 5 by writing a mail to <a href="mailto:Indscourses@gmail.com">Indscourses@gmail.com</a> (with your supervisor in copy) and stating the course title as subject.</p>                                                                                                                                                                                                                                                                |