

| Course Code & Title | LISS362 Introduction to Systematic Reviews | | | | | |
|--|---|----------------------|---|-------------------------|-----------------|--|
| Convenor(s) | Farida Soliman (<u>f.a.i.soliman@qmul.ac.uk</u>) | | | | | |
| Institution | QMUL | | Department | | | |
| Academic Year | 2024 | | Term | Summer | | |
| Number of sessions | 6 | Research Platform | Social Theory & Epistemology (STE) Qualitative Research (QuL) Quantitative Research (QuT) | Length of Session(s) | 2 hour sessions | |
| Day, Date | | | Start : End | Room Location | | |
| Tuesday 30/04/2024 Tuesday 07/05/2024 Tuesday 14/05/2024 Tuesday 21/05/2024 Tuesday 28/05/2024 Tuesday 04/06/2024 | | | 10:00 : 12:00 | Via Zoom | | |
| Enrolment | Available to book on SkillsForge from Tuesday 2 April 2024 . Click to log in and register: https://training.kcl.ac.uk/kcl/#he/dev/eventDetails,;em,providerCode=LISS,providerOrgAlias=kcl,number=362 ,; Questions? Visit our Training FAQ here: | | | | | |

Course Description:

This course is designed for students of any disciplinary backgrounds that are interested in learning about or conducting a systematic review for their own work. Through this course we will go through the practical steps needed to conduct a systematic literature review as well as the principles underlying these steps. At the end of this course, students should feel confident conducting their own systematic review and develop their ability to evaluate other systematic reviews.

Course overview

The overall aim of this course is to provide students with a holistic overview of systematic reviews as well as equip them with the necessary practical skills to conduct their own systematic reviews. The course combines both theoretically and practically driven sessions to ensure students are able to apply the methods learned in the theory sessions. There are 5 main themes for this course; firstly, a theoretical understanding of the research methodology as a whole. Secondly, the course shifts it's focus to designing and planning a review (including all the pre-review steps needed to ensure the review is conducted smoothly). Thirdly, we go through the steps required to conduct a systematic review after the planning stage. Having covered the practical elements of conducting a systematic review, the course explores the different ways in which data can be synthesised and, finally, disseminated.

After completing the course, students should feel confident planning a systematic review and going through its different phases. Students will also have gained a brief overview of different synthesis methods and ways in which they can communicate their findings.



The learning outcomes are described below based on the 5 main themes discussed above.



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Advanced Research Methods in Social Sciences

Theory and underlying principles

By the end of the course students should:

- Understand what a systematic review is and why it is useful. This includes familiarisation with the different types of reviews (e.g., scoping reviews, rapid reviews, evidence and gap maps, metareview) and why one might apply these methods.
- Understand the difference between the systematic review element and the synthesis.
- Understand the similarities and differences between qualitative, quantitative, and mixed methods systematic reviews (within this also develop a basic understanding of the different approaches to systematic review synthesis).
- Explore the differences between additive/aggregative and interpretive/configurative methods of systematic reviews and syntheses.

Designing & planning a systematic review

- Learning to define your research question and selecting your methodology.
- Identifying and reaching out to relevant stakeholders during the design stage of the review.
- Understanding the importance of setting up and defining your conceptual framework during the planning phase of the review.
- Defining your inclusion and exclusion criteria based on your framework.
 - Understanding the implications behind the criteria outlined above and some of the practical choices you might be forced to make regarding feasibility of completing a review.
 - Setting parameters regarding dates, types of studies to be included, choice of database,
 and being able to weigh up costs/benefits.
- How to write and register a systematic review protocol.

Conducting a systematic review

- Evaluating pros/cons of different systematic review software or reference management programs (EPPI, Zotero, Endnote, or manually on Excel).
- Identifying studies for the systematic review with database searching, using grey literature, backwards and forwards citation tracking, and other sources.
 - o Learn how to develop and pilot a search strategy.
 - o Understand the differences and benefits of exhaustive, narrow, iterative searches.
 - Organise references and records throughout the search and the review "basic housekeeping" and transparency/replicability.
 - Evaluate the efficacy of a search and mitigating different biases.
- Screening the identified studies and determining study eligibility
 - Students will learn how to
 - Develop screening tools.
 - Pilot screening tools and reconcile differences.
 - Reduce human error and ensure consistency amongst the review team.
 - Ensure transparency throughout the screening processes.
- Data extraction and quality assessment
 - What tools are available for use



- How do these vary based on the type of review and type of included studies (more qualitative or quantitative).
- o How to capture the data you need
 - Piloting your tools and ensuring consistency amongst coders.
 - Open vs closed coding.
- Quality appraisal and its impact on the validity of the systematic review
 - Different dimensions of quality assessment (for the included studies and the systematic review as a whole).
 - Justifying ecological validity of your review and results.
 - Assessing the methodological standards of the included studies.
 - How to integrate quality assessment in the review.

Approaches to systematic review synthesis

- Develop a basic and high-level understanding of different approaches to synthesis.
- Recognise how different research questions and different methods affect the synthesis.
- Identify which synthesis methods are suitable for different research questions.

Presenting your findings

- Communicating the systematic review findings to academic and non-academic audiences.
- How to transparently report your findings and ensure the review adheres to best practice.

Course Breakdown

Please note that throughout **the entirety of the course**, students can book 15-30 min feedback sessions to go over their specific projects and provide tailored feedback. This is to accommodate for students at different levels of progress in their systematic reviews. Students may request feedback on anything relating to the course especially refining their research question, developing their conceptual framework, or writing their systematic review protocols. During these feedback sessions, students are encouraged to submit their work ahead of the session for more detailed feedback on their writing.

| Week | Dates | Key material being covered | | |
|------|-------|---|--|--|
| 1 | 30/04 | Understanding what systematic reviews are Defining research question and identifying the problem (who needs the review, what is it for etc) | | |
| 2 | 07/05 | Identifying studies relevant to your review How to develop a search strategy Defining PICOS and conceptual framework Piloting and conducting the search | | |
| 3 | 14/05 | Study eligibility Implications to method selection Different ways to code studies Developing your screening tool and coding your studies. Best practice in screening | | |
| 4 | 21/05 | Data extraction & Quality Assessment (quantitative reviews) Data extraction and quality assessment (qualitative review) | | |



| 5 | 28/05 | Quality assurance throughout the reviewProtocol writing workshop | |
|---|-------|---|--|
| 6 | 04/06 | Different ways to synthesise data | |
| | | Communicating your findings and using the review | |

Reading List:

Main Textbook to be used:

Gough, D., In Oliver, S., & In Thomas, J. (2012). An introduction to systematic reviews. London: Sage.

Eligibility:

Systematic reviewing as a methodology is a useful tool for all social sciences, but specifically researchers focused on policy and practice, health/mental health, and childhood development.

Pre-course preparation:

- Students already aiming to complete or start a systematic review should send in a brief description of their research questions, planned methods (if any), and research interests.
- Students should familiarise themselves with databases relevant to their field of interest.

Number of students:

Minimum number required to run: 5

Maximum number of places available: 20