


Introduction to Systematic Reviews and Critical Appraisal

Centre for Reviews and Dissemination,
University of York

COURSE OUTLINE

November 2025

Module 0: Introduction and orientation

Video 5 mins	Live workshop 120 mins	Discussion board 15 mins	Total estimated learning time
			140 mins

Thursday 30th October, 2025

Pre-module

Video: Introducing the course

Live workshop

10.00 – 12.00 [UK time]



- o Welcome and introduction
- o Orientation to the platforms and technology we will be using
- o Socialisation: meet your tutors and other learners
- o Sharing exercises: what would you like to get out of the course
- o Information about support
- o Introduction to course homework

Post-module

Discussion board:

- o What are your research questions?
 - o Any questions, feedback or technical support?
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Module 1: Developing the review question and protocols

Live workshop 1 80 mins	Live workshop 2 30 mins	Total estimated learning time
		80 + optional 30 mins

Monday 3rd November, 2025

Live workshop 1

9.30 – 10.50 [UK time]

- o Presentation: PICOS and review questions
- o Group exercises: PICOS and analysing a review question
- o Presentation: Review protocols; registering a review protocol
- o Question and answer session

Live workshop 2

10.50 – 11.20 [UK time]

- o OPTIONAL review questions clinic
- o Opportunity to discuss your review questions with our experts

Post-module

Resource: Information on registering a review on PROSPERO

- o Any questions, feedback or technical support?
 - o Read in your own time
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Module 2: Literature searching

Videos 45 mins	Live workshop 60 mins	Total estimated learning time
		105 mins

Tuesday 4th November, 2025

Pre-module

Videos: Introduction to and importance of literature searching

Live workshop

9.30 – 10.30 [UK time]



- o Group exercise: search strategy quiz
- o Presentation: Beyond Medline – why search extensively?
- o Presentation: Take home messages
- o Question and answer session

Post-module

Resource: Further learning materials

- o MeSH terms, term harvesting; databases; search strategies
 - o Read in your own time
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Module 3: Study selection

Videos 20 mins	Live workshop 120 mins	Total estimated learning time
		140 mins

Tuesday 4th November, 2025

Pre-module

Videos: Introducing study selection and group exercise

Live workshop

10.50 – 12.50 [UK time]

- o Group exercises: screening based on titles and abstracts
 - o Presentation: common issues and tips
 - o Question and answer session
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Module 4: Data extraction

Videos 20 mins	Pre-module prep 45 mins	Live workshop 90 mins	Total estimated learning time
			170 mins

Wednesday 5th November, 2025

Pre-module

Videos: Introducing data extraction; Designing and testing a data extraction form

Pre-module Prep:




- o Download and read three papers to prepare for data extraction exercise
- o Download and read example data extraction form

Live workshop

9.30 – 11.00 [UK time]

- o Group exercise: data extraction exercise
 - o Follow-up discussion and summary
 - o Presentation: Common issues
 - o OPTIONAL 'Ask the expert' brief session
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Module 5: Critical appraisal of included studies

Videos 75 mins	Pre-module prep 30 mins	Live workshop 60 mins	Total estimated learning time
			165 mins

Thursday 6th November, 2025

Pre-module

Videos: Internal validity, external validity and critical appraisal issues

Pre-module Prep:



- o Read instructions and paper for critical appraisal exercise
- o Discussion board – questions or support about paper and instructions

Live workshop

9.30 – 10.30 [UK time]

- o Group exercise: appraise a set of provided vignettes and identify bias
 - o Discussion, feedback, Q&A on bias exercise
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Module 6: Calculating treatment effects

Videos 15 mins	Live workshop 60 mins	Total estimated learning time
		75 mins

Thursday 6th November, 2025

Pre-module




Video: Introducing treatment effects

Live workshop

11.00 – 12.00 [UK time]

- o Group exercise: calculating effects estimate
 - o Discussion, feedback, Q&A
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Module 7: Meta-analysis

Videos 140 mins	Live workshop 90 mins	(Optional) Practical 120 mins	Total estimated learning time
			350 mins

Friday 7th November, 2025

Pre-module

Videos:

- o Introduction to meta-analysis
- o Issues in meta-analysis – heterogeneity
- o Problems for meta-analysis – missing studies, publication bias
- o Why not always do a meta-analysis – narrative synthesis

Practical Exercise (*Optional*):

- o Exercise: Conduct a meta-analysis

Monday 10th November, 2025

Live workshop (*Optional*)

11.30 – 12.30 [UK time]

- o 'Ask the expert' clinic for questions about the optional exercise


Tuesday 11th November, 2025

Live workshop

9.30 – 11.00 *[UK time]*

- o Group exercise: Interpreting meta-analysis results
 - o Q&A Session
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Module 8: Reporting your review

Videos <i>30 mins</i>	Total estimated learning time
	30 mins

No live session

In your own time learning



Videos:

- o Reporting review findings
- o Writing the discussion
- o Checklists and guidance for reporting your review

Resources:

- o Resources for reporting and writing the discussion
 - o Resources on reporting guidelines
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Module 9: GRADE

Videos 60 mins	Live workshop 125 mins	Total estimated learning time
		185 mins

Wednesday 12th November, 2025

Pre-module

Videos:

- o Estimate vs. uncertainty of an outcome
- o About GRADE and SoF tables
- o Completing a GRADE assessment
- o Communicating findings
- o Relative vs. absolute risk

Live workshop

9.30 – 11.35 [UK time]

- o Group exercise: GRADEing of a Zinc supplementation review
 - o Group exercise: Conclusions based on GRADE assessment
 - o Presentation: Completing GRADE assessment
 - o 'Ask the expert' clinic – follow-up questions from exercise, other questions about GRADE assessment
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Module 10: Critical appraisal of a systematic review

Live workshop 90 mins	Total estimated learning time
	90 mins

Thursday 13th November, 2025

Live workshop

10.00 – 11.30 [UK time]

- o Group exercise: What makes a good systematic review
 - o Group exercise: Using critical appraisal checklists
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Module 11: Introduction to health economics

Live workshop 60 mins	Total estimated learning time
	60 mins



Friday 14th November, 2025

Live workshop

9.30 – 10.30 [UK time]

- o Live presentation: Key concepts, challenges and relevance to systematic reviews
 - o 'Ask the expert' Q&A and discussion
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Module 12: Knowledge mobilisation

Videos 35 mins	Live workshop 60 mins	Total estimated learning time
		95 mins

Friday 14th November, 2025

Pre-module

Videos:

- o The what, why and who of knowledge mobilisation
- o When knowledge mobilisation happens
- o How knowledge mobilisation happens

Pre-module Prep:

Read case study to prepare for practical task

Live workshop

10.50 – 11.50 [UK time]

- o Group exercise: stakeholder mapping
- o Group exercise: Reviewing types of knowledge mobilisation outputs; what does it mean to 'use evidence'?

COURSE CLOSE