

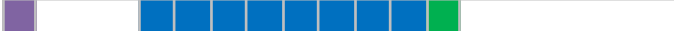
# Introduction to Systematic Reviews and Critical Appraisal

Centre for Reviews and Dissemination,  
University of York

## **COURSE OUTLINE**

*November 2024*

## Module 0: Introduction and orientation

<b>Video</b> 5 mins	<b>Live workshop</b> 120 mins	<b>Discussion board</b> 15 mins	Total estimated learning time
			140 mins

Thursday 14<sup>th</sup> November, 2024

### 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?
-

## Module 1: Developing the review question and protocols

<b>Live workshop 1</b> 80 mins	<b>Live workshop 2</b> 30 mins	Total estimated learning time
		80 + optional 30 mins

Monday 18<sup>th</sup> November, 2024

### 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
-

## Module 2: Literature searching

<b>Videos</b> 45 mins	<b>Live workshop</b> 60 mins	Total estimated learning time
		105 mins

Tuesday 19<sup>th</sup> November, 2024

### 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
-

## Module 3: Study selection

Videos <i>20 mins</i>	Live workshop <i>120 mins</i>	Total estimated learning time
		140 mins

Tuesday 19<sup>th</sup> November, 2024

### 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
-

## Module 4: Data extraction

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

Wednesday 20<sup>th</sup> November, 2024

### 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
-

## 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 21<sup>st</sup> November, 2024

### 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
-

## Module 6: Calculating treatment effects

<b>Videos</b> 15 mins	<b>Live workshop</b> 60 mins	Total estimated learning time
		75 mins

Thursday 21<sup>st</sup> November, 2024

### 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
-



## Module 7: Meta-analysis

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

Friday 22<sup>nd</sup> November, 2024

### 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 25<sup>th</sup> November, 2024

### Live workshop (*Optional*)

11.30 – 12.30 [UK time]

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


Tuesday 26<sup>th</sup> November, 2024

**Live workshop**

9.30 – 11.00 *[UK time]*

- o Group exercise: Interpreting meta-analysis results
  - o Q&A Session
-

## Module 8: Reporting your review

<b>Videos</b> <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
-

## Module 9: GRADE

<b>Videos</b> 60 mins	<b>Live workshop</b> 125 mins	Total estimated learning time
		185 mins

Wednesday 27<sup>th</sup> November, 2024

### 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
-

## Module 10: Critical appraisal of a systematic review

<b>Live workshop</b> <i>90 mins</i>	Total estimated learning time
	90 mins


Thursday 28<sup>th</sup> November, 2024

### Live workshop

10.00 – 11.30 [UK time]

- o Group exercise: What makes a good systematic review
  - o Group exercise: Using critical appraisal checklists
- 

## Module 11: Introduction to health economics

<b>Live workshop</b> <i>60 mins</i>	Total estimated learning time
	60 mins



Friday 29<sup>th</sup> November, 2024

### 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
-

## Module 12: Knowledge mobilisation

<b>Videos</b> 35 mins	<b>Live workshop</b> 60 mins	Total estimated learning time
		95 mins

Friday 29<sup>th</sup> November, 2024

### 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**