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Faculty of Health, Science and Technology  
Common

## Syllabus

### Systematic Reviews in Health Sciences

**Course Code:** 7OMV001  
**Course Title:** Systematic Reviews in Health Sciences  
*Systematiska översikter inom hälsovetenskaper*  
**Credits:** 7.5 ECTS  
**Degree Level:** Doctoral

#### **Course Approval**

The syllabus was approved by the Faculty of Health, Science and Technology, 03 May 2017 and is valid from the autumn semester 2017.

#### **Language of instruction**

Teaching is in English and Swedish. English will be used as the course language if there are international students.

#### **Prerequisites**

Qualification requirements are admission to a doctoral programme in Health Sciences or at a minimum a Masters Degree in Health Sciences, or equivalent. The course is primarily for PhD students at Karlstad University, secondly for PhD students admitted to other universities, and thirdly for students with a Master Degree.

### **Learning Outcomes**

Upon completion of the course the student should be able to

- differentiate and compare different types of systematic reviews
- demonstrate the ability to develop a protocol for a Systematic or integrative Review
- apply a systematic literature search
- identify and evaluate the criteria and steps required in different types of Systematic Reviews
- apply and evaluate critical appraisal/quality appraisal and data extraction methods to the Systematic Review process
- select appropriate methods for data synthesis and meta-analysis
- report and disseminate findings of Systematic Reviews in a relevant format

### **Course Content**

The aim of this course is to provide an introduction to systematic review methodology and critical appraisal skills. The focus will be on health sciences research. This course will start with an intensive week of study on campus using a combination of lectures, workshops and seminars. Thereafter the students work on their examination paper, consisting of a protocol for a planned systematic review. The course concludes with an opponent and respondent seminar where the doctoral students discuss their individual examination tasks.

- Formulating a systematic/integrative review question
- Different types of Systematic Reviews e.g. Meta-Analysis, Meta-synthesis, and Mixed Studies Reviews/Integrative Reviews.
- Systematic Review Protocols
- Criteria and steps in different types of systematic/integrative reviews
- Inclusion and exclusion criteria for included studies
- Search strategies and literature searching
- Critical Appraisal/Quality Appraisal
- Data extraction
- Methods for data analysis and synthesis
- Reporting and disseminating systematic/integrative reviews

### **Reading List**

See separate document.

### **Examination**

The course will be examined by an individual written paper, which will be critically reviewed at an opponent and respondent seminar.

### **Grades**

One of the grades Fail (U) or Pass (G) is awarded in the examination of the course.

### **Quality Assurance**

The course convenor has a duty to encourage a continuous dialogue on learning processes and goal fulfilment. A written evaluation is carried out at the conclusion of the course combined with a joint student-teacher discussion of all aspects commented on. The result of the evaluation is collated and made available in accordance with *The Higher Education Ordinance*, Chapter 1, § 14.

### **Course Certificate**

Course certificate is issued on request.



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Faculty of Health, Science and Technology  
Health Sciences

## Optional Reading List

### Systematic Reviews in Health Sciences

Valid from autumn semester 2017

**Course Code:** 70MV001  
**Course Title:** Systematic Reviews in Health Sciences  
*Systematiska översikter inom hälsovetenskaper*  
**Credits:** 7.5 ECTS  
**Degree Level:** Doctoral

#### Books

Aveyard H. (2014). *Doing a literature review in health and social care: a practical guide*. 3<sup>rd</sup> ed. Maidenhead: Open University Press.

Bettany-Saltikov J. (2012). *How to do a systematic literature review in nursing: a step-by-step guide*. Maidenhead: McGraw-Hill/Open University Press.

Boland A, Cherry MG, Dickson R. eds. (2014). *Doing a systematic review: a student's guide*. London: Sage Publications.

Booth A, Papaioannou D, Sutton A. (2012). *Systematic approaches to a successful literature review*. London: Sage Publications.

Gough D, Oliver S, Thomas J, eds. (2012). *An introduction to systematic reviews*. London: Sage Publications.

Polit, D & Beck, C T. *Nursing research: Generating and Assessing Evidence for Nursing Practice*. (2016). Philadelphia: Lippincott.

## Useful Websites

Cochrane Library.

<http://www.cochranelibrary.com/> [Accessed 5 April 2017]

Campbell Collaboration.

<https://www.campbellcollaboration.org/> [Accessed 5 April 2017]

Evidence for Policy and Practice Information and Co-ordination Centre (EPPI-Centre).

<https://eppi.ioe.ac.uk/cms/> [Accessed 5 April 2017]

PRISMA flow diagram.

<http://www.prisma-statement.org/> [Accessed 5 April 2017]

## Quality appraisal checklists

Critical Appraisal Skills Programme (CASP).

<http://www.casp-uk.net/casp-tools-checklists> [Accessed 5 April 2017]

Scottish Intercollegiate Guidelines Network (SIGN).

<http://www.sign.ac.uk/methodology/checklists.html> [Accessed 5 April 2017]

## Level of evidence

Scottish Intercollegiate Guidelines Network (SIGN): SIGN Grading System.

<http://www.sign.ac.uk/guidelines/fulltext/50/annexoldb.html> [Accessed 5 April 2017]

## Assessing risk of bias

Higgins, JPT & Green, S., (eds). (2011). *Cochrane Handbook for Systematic Reviews of Interventions*. Retrieved from <http://handbook.cochrane.org/>

SBU – Swedish Agency for Health Technology Assessment and Assessment of Social Services. *Assessment of methods in health care. A handbook* (2017).

## Reporting and write up

Preferred Reporting Items for Systematic Reviews and Meta-analyses: The PRISMA Statement.

<http://www.prisma-statement.org/Default.aspx> [Accessed 7 April 2017]

Enhancing transparency in reporting the synthesis of qualitative research (ENTREQ)

<http://www.equator-network.org/reporting-guidelines/entreq/> [Accessed 7 April 2017]

## Approval

Approved by the Faculty of Health, Science and Technology, 03, May, 2017.