



# FJP3101 Conducting Systematic Literature Reviews in Systems Engineering 5.0 credits

Genomföra systematiska litteraturstudier i systemteknik

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

## Establishment

Course syllabus for FJP3101 valid from Spring 2018

## Grading scale

## Education cycle

Third cycle

## Specific prerequisites

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

After the course, the student should be able to:

- describe different methodologies for systematic literature reviews.
- identify the most appropriate systematic literature review methodology for a certain research topic in systems engineering.
- conduct a systematic literature review for a certain research topic in systems engineering, including analyzing the literature in an appropriate manner.
- present systematic literature reviews in an academic acceptable manner.

## Course contents

In this course we will discuss the difference between a “regular” related works section in a paper and a systematic literature review. We will study and compare different methods for conducting literature reviews, with focus on systematic methods and so-called meta-analyses. We will learn about the main differences between the different methods and what the pros and cons are with each. Each student will apply the most suitable method to his or her topic of study, within the area of systems engineering. This will be reported in an academic way, to either stand alone as contribution to the field or as a thorough traceable related work section for future papers on the topic.

## Disposition

Lectures, seminars, presentations, and project report

## Course literature

Booth, Andrew, Anthea Sutton, and Diana Papaioannou. Systematic approaches to a successful literature review. Sage, 2016.

And various papers on the topic decided together with the students during the course depending on what research fields that should be addressed.

## Examination

Based on recommendation from KTH’s coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

## Other requirements for final grade

- Three 15 minute oral presentations during seminars
- Project (preferably on a topic related to the student’s own research)
- One 30 minute oral presentation of project

- Written project report

## **Ethical approach**

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.