

## Institutionen för data- och systemvetenskap (DSV)

# Kursplan

för kurs på forskarnivå Forskningsmetodik I Research Methodology I

10.0 Högskolepoäng 10.0 ECTS credits

Kurskod: ML3FU30 Gäller från: VT 2017

Institution Institutionen för data- och systemvetenskap

### Förkunskapskrav och andra villkor för tillträde till kursen

Enrolled to a PhD program

#### Lärandemål

After the course students are able to:

- · Understand and discuss the application of qualitative and quantitative methods
- · Discuss and explain the philosophical and practical differences between the qualitative and quantitative methods
- · Examine and discuss strengths and weaknesses of qualitative and quantitative data collection and analysis methods.

#### Innehåll

The aim of the course is to provide the participants with a broad base for PhD studies in computer and systems sciences as well as its scientific base and societal aspects. The methodological understanding will focus on skills as a reviewer of other's research, both in the general research area and the student's specific subarea

The course consists of a number of discussion seminars, prepared for by each participant, focusing on different aspects. An example structure is:

Seminar 1: Science, computer and systems science, and societal aspects.

Seminar 2: Quantitative analysis - discussion of the findings of the methodological literature review on selected papers.

Seminar 3: Qualitative analysis - discussion of the findings of the methodological literature review on selected papers.

Seminar 4: Qualitative analysis - discussion of the findings of the methodological literature review on the student's own research area.

Seminar 5: Quantitative analysis - discussion of the findings of the methodological literature review on the student's own research area.

Seminar 6 Discussion and presentation of student reports consisting of the scientific and societal aspects of research in one owns research area (with a broad reading of what that area is) and the improved literature reviews of seminar 4 and 5.

#### Obligatoriska moment

The course consists of a number of discussion seminars, prepared for by each participant, focusing on different aspects. An example structure is:

Seminar 1: Science, computer and systems science, and societal aspects.

Seminar 2: Quantitative analysis - discussion of the findings of the methodological literature review on selected papers.

Seminar 3: Qualitative analysis - discussion of the findings of the methodological literature review on selected papers.

Seminar 4: Qualitative analysis - discussion of the findings of the methodological literature review on the student's own research area.

Seminar 5: Quantitative analysis - discussion of the findings of the methodological literature review on the student's own research area.

Seminar 6 Discussion and presentation of student reports consisting of the scientific and societal aspects of research in one owns research area (with a broad reading of what that area is) and the improved literature reviews of seminar 4 and 5.

#### **Examinationsformer**

- a. Decision regarding examination are taken by the course leader appointed by the head of the department. b. Assessment is done according to the grading scale:
- P/F
- c. Grading criteria of the course is announced in the beginning of the course.

The course is examined continuously. Total amount of credits: 10.

- d. To receive a final grade for the whole course, grade Passed is required for all the assignments.
- e. In addition, the student who:
- has received at least grade P cannot raise the grade by a new exam
- has taken the same exam twice with the same examiner without passing has a right to a new examiner, provided that no special reasons against this exist.

#### **Arbetsform**

Teaching consists of seminars, reading of literature and writing. The number of hours studied is estimated at approximately 275 hours including approximately 30 hours (12%) seminars. The remainder of the time is study without a teacher that the student must devote to reading of literature, preparing presentations, and writing assignments.