



COURSE SYLLABUS

Theory of Science and Research Methodology, 4 credits

Vetenskapsteori och forskningsmetodik, 4 högskolepoäng

Course Code:	FTVFM38	Education Cycle:	Third-cycle level
Confirmed by:	Dean Oct 29, 2018	Research subject:	
Valid From:	Oct 29, 2018		
Version:	1		

Intended Learning Outcomes (ILO)

On completion of the course the student should:

Knowledge and understanding

- demonstrate basic understanding of various scientific traditions relevant to the field industrial product realisation
- demonstrate deeper knowledge of scientific methods in general and of methods in the specific field of research in particular

Skills and abilities

- demonstrate an ability to identify and formulate issues and to plan with appropriate methods a limited research task

Judgement and approach

- demonstrate insight into quality in research
- demonstrate insight into the possibilities and limitations of science

Contents

The course includes:

- Basics within theory of science
- Different research designs
- Case study, design science/design research, experiment, action/interactive research, modelling/simulation, etc. based on the needs in the group
- Techniques for data collection (of empirical material)
- Quality in research

Type of instruction

Lectures and seminars.

The teaching is normally conducted in Swedish, but can occasionally be in English.

Prerequisites

Admitted to third-cycle programme or equivalent.

Examination and grades

The course is graded Fail (U) or Pass (G).

Examination includes oral and written parts within two assignments, of which one is individual and one is a group assignment.

Registration of examination:

Name of the Test	Value	Grading
Assignments	4 credits	U/G

Course literature

Theory of Science and Research Methodology

Williamson, K. (2002) *Research methods for students and professionals*, 2nd ed., Centre for Information Studies, Wagga wagga, NSW.

or

Karlsson, C. (2016) *Research Methods for Operations Management*, Routledge, Taylor & Francis Group, London.

Additional material is handed out.