

# DM2711 Research Methods in Interactive Media Technology 9.0 credits

Forskningsmetodik för interaktiv medieteknik

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

#### **Establishment**

Course syllabus for DM2711 valid from Autumn 2017

### **Grading scale**

P, F

#### **Education cycle**

Second cycle

#### Main field of study

Computer Science and Engineering

## Specific prerequisites

# Language of instruction

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

#### Intended learning outcomes

The course gives a broad introduction to knowledge production, theory and method within the area of interactive media and communication technology. Based on a general theory of science introduction, the course will give specialisation within engineering, humanÂ- and design scientific attempts with a focus on central theories and methods. Design of studies, data collection techniques and analysis of data are introduced and connected also to social and ethical issues.

On completion of the course, the student should be able to

- apply basic research methodology within empirical science, engineering science and design science
- design research projects with consistent use of theory and method to be able to answer a specific question and/or create a design based on specific preconditions
- discuss the relation between theory, method and analysis
- critically assess the results and analysis a research project based on its attempt
- discuss possibilities and limitations of different data collection techniques, methods, analyses and theoretical perspectives
- discuss ethical and social aspects within research in media technology

#### Course contents

Theory of knowledge; theoretical perspectives, data collection methods, analysis within interactive media technology and research-ethical aspects on these; different views on knowledge production, research and technical development and design.

#### Course literature

Philosophy of Science: A Very Short Introduction Samir Okasha (2016 or 2002) Oxford University Press

Research Methods In Human-Computer Interaction Jonathan Lazar, Jinjuan Heidi Feng, Harry Hochheiser (2010) John Whiley and Sons

Additional articles/texts distributed in class.

#### **Examination**

- INL1 Assignment 1, 2.0 credits, grading scale: P, F
- INL2 Assignment 2, 2.0 credits, grading scale: P, F
- INL3 Assignment 3, 2.0 credits, grading scale: P, F
- INL4 Assignment 4, 3.0 credits, grading scale: P, F

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.

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

# Other requirements for final grade

Compulsory attendance occurs in the course.

### 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.