



Course syllabus

Faculty of Technology
Department of Media Technology

4ME301 Vetenskaplig teori och metod, 7,5 högskolepoäng
Scientific Theories and Methods, 7.5 credits

Main field of study

Media Technology

Subject Group

Media Production

Level of classification

Second Level

Progression

A1N

Date of Ratification

Approved by Faculty of Technology 2014-10-03
The course syllabus is valid from autumn semester 2015

Prerequisites

22.5 credits at G2F-level in Media Technology or the equivalent.

Objectives

The aim of this course is to provide students with knowledge and understanding of different scientific theories and methodologies applicable in the field of Media Technology.

Upon completion, the student should be able to:

- thoroughly explain and understand the meaning of fundamental scientific concepts
- effectively search for relevant information and literature
- identify, formulate and describe scientific problems
- make thoughtful choices of alternative research approaches
- thoroughly describe, compare and explain advantages and disadvantages of different scientific methods for gathering quantitative and qualitative data
- apply fundamental scientific methods to analyze quantitative and qualitative data
- understand different frameworks for theory construction
- assess and review scientific publications.

Content

The course comprises of:

- Investigation of epistemological and methodological approaches in the field of Media Technology.
- Scientific literature retrieval.

- Structuring and writing scientific papers in accordance with international standards for scientific publishing.
- Presentation and discussion of relevant scientific issues in the field of Media Technology.

Type of Instruction

Lectures, seminars and workshops.

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

Assessment in this course will be comprised of: written and/or oral examinations, assignments as well as mandatory seminar work. At the beginning of the course it will be decided on what types of assessment used.

Students who do not pass the regular examination are given the opportunity to do a reexamination shortly after the regular exam.

Course Evaluation

A course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The result of the course evaluation will be filed at the department.

Credit Overlap

This course cannot be part of a degree in combination with another course in which the content fully or partly correspond to the content of this course: 4ME101 Scientific Theories and Methods, 7.5 credits

Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Required Reading and Additional Study Material

Required Reading

Gray, D. (2010) *Doing research in Real World*. SAGE publications, London, UK. Latest Edition. 624 (624) pages.

Lazar, J., Feng, J. H., and Hochheiser H. (2010) *Research Methods in Human-Computer Interaction*. John Wiley & Sons Ltd, West Sussex, UK, Latest Edition. 419 (419) pages.

Jaccard, J. and Jacoby, J. (2010) *Theory construction and model-building skills: a practical guide for social scientists*. The Guilford Press, New York, Latest Edition. 150(393)pages.

DFM, *Distributed materials*, 150 pages