



LUND
UNIVERSITY

Faculties of Humanities and Theology

HTXN11, Motion Capture Research Methods, 7.5 credits

*Sensorbaserad kroppsinspelning som forskningsmetod, 7,5
högskolepoäng*

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by The pro-dean for First-Cycle Studies at the Faculties of Humanities and Theology on 2016-04-05 to be valid from 2016-04-05, spring semester 2016.

General Information

The course is offered as a freestanding course. It can normally be included in a first or second cycle degree.

Language of instruction: English

The course is normally taught in English, but can also be taught in Swedish, provided there is a special agreement between the lecturer/s and the students. Such an agreement requires that all lecturers and all students are proficient in Swedish.

Main field of studies

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Depth of study relative to the degree requirements

A1N, Second cycle, has only first-cycle course/s as entry requirements

Learning outcomes

On completion of the course, the students shall be able to

Knowledge and understanding

- explain the principles of motion capture systems
- account for different motion capture techniques and their fields of use
- explain which motion capture configurations can be used for different research questions

Competence and skills

- set up and calibrate a marker-based motion capture system
- plan, configure and perform motion capture recordings for different research questions
- account for different data formats and the difference between position and rotation data
- analyse and interpret results of motion capture recordings
- transfer recorded data to different applications and process them there

Judgement and approach

- evaluate a proposed system configuration and anticipate potential problems
- critically evaluate the possibilities and limitations of motion capture technology

Course content

The course provides students with a general introduction to 3D data, practical experience of working with motion capture systems to record and analyse mobile 3D data, and transfer and process mobile 3D data in other applications. The course also provides an introduction to the technology behind motion capture and discusses different work flows that can be used for different research issues.

Course design

The teaching consists of lectures, exercises and 2-4 compulsory laboratory sessions.

Assessment

The assessment is based on 2-4 compulsory written assignments and a project report. *Subcourses that are part of this course can be found in an appendix at the end of this document.*

Grades

Marking scale: Fail, Pass, Pass with distinction.

Entry requirements

To be admitted to the course, students must have a Bachelor's degree.

Further information

1. The course is offered at the Humanities Lab, Lund University
2. The credits allocated for course content that in whole or in part is commensurate with another course can only be credited once for a degree. For further details see the current registration information and other relevant documentation.

Subcourses in HTXN11, Motion Capture Research Methods

Applies from V16

1601 Motion Capture Research Methods, 7,5 hp
Grading scale: Fail, Pass, Pass with distinction