



Course syllabus

Faculty Board of Science and Engineering
School of Computer Science, Physics and Mathematics

1ME202 3D-grafik och animering, 7,5 högskolepoäng
3D-graphics and animation, 7.5 credits

Main field of study

Media Technology

Subject Group

Media Production

Level of classification

First Level

Progression

G1F

Date of Ratification

Approved by Organisational Committee 2009-12-15

The course syllabus is valid from spring semester 2010

Prerequisites

General entry requirements and Mathematics B and Physics A (Field-specific entry requirements 7). Knowledge within the subject of Digital video production, (7,5 Higher Education Credits 1ME201) or Visualization, analog and digital methods, (15 Higher Education Credits 1BY077) or Computer Aided Drawing, part,2 (7.5 Higher Education Credits 1BY015), or the equivalent.

Expected learning outcomes

Upon completion of the course the student should:

- be able to create models in a 3D environment
- be able to put lighting on the models according to established practice and theory
- be able to put on texture on the models according to established practice and theory
- be able to describe the difference between various ways of rendering and be able to use at least one of them
- know how to animate objects in a 3D environment and explain the various ways of animation
- understand what principles underlie animation

Content

The course consists of:

- different ways to model and create there objects

- lightning and texturing to emphasize the feeling tried to attained. Which may be photographic quality or purely artistic.
- rendering is the different way in which a scene can generate to a 2Dbild or animated
- the principles underlying the creation of an attractive animation

Type of Instruction

Teaching consists of lectures, seminars, tutorials and practicals. Practical work is conducted individually or in groups. Attendance is mandatory for some sessions.

Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

A translation of the grade to the ECTS scale may be obtained upon request. The request for a translation should be made before the grade for the course is awarded.

Written examination and/or assignments which are presented orally and/or in written form. The assessment method is decided at the start of the course.

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

Course Evaluation

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

Other

Upon request, a Swedish University course certificate will be awarded upon successful completion of the course.

Required Reading and Additional Study Material

Required reading

Birn, J, *Digital Lighting and Rendering (2nd Edition)*, 2006. Pages 275 (280).

Kerlow, I W, *The Art of 3D: Computer Animation and Effects, 3rd Edition*, 2003. Pages 440 (451).

Murdock, K L, *3ds max 2009 bible*, Indianapolis, IN, Wiley Pub., inc., 2008. Pages 1200 (1248).

DFM, *Distributed material*. Pages app. 100.