



# IV1010 Introduction to Computer Game Development 7.5 credits

Introduktion till spelkonstruktion

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

## Establishment

Course syllabus for IV1010 valid from Autumn 2008

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

First cycle

## Main field of study

Technology

## Specific prerequisites

For single course students the following is required:

- completed and documented upper secondary education incl documented proficiency in Swedish and English for applicants without knowledge of Swedish, which is one of the general entrance requirements for undergraduate studies in Sweden.

## Language of instruction

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

## Intended learning outcomes

The student should be able to identify, define and describe different computer game genres and their typical properties, to compare and relate computer game genres to each other, and to combine several genres into combinations whose properties should be compared to and contrasted against other game genres and game genre combination by the student, and/or reflect this in implementation.

The student should also be able to describe the history and development of computer games, to give examples of important breakthrough achievements in the area, and also to identify special conditions regarding various hardware platforms for gaming, relating this to the suitability of different game genres to these hardware platforms, and/or relate to these areas during the mandatory seminar.

The student should be able to generalize and give high-level descriptions of typical game content and narrative game concepts, to give examples of implementations of key figures and point out their higher-level function, as well as motivate and evaluate their existence within the game content, and/or reflect this in implementation.

The student should further be able to describe and compare basic two-dimensional image formats, and to explain the principles of the compression techniques involved, and to summarize important principles of 3D-graphics in the context of computer games, and/or reflect this in implementation.

The student should be able to apply relevant parts of the course content by implementing a computer game prototype using a designated development tool.

## Course contents

The course content is presented during a series of lectures in Swedish throughout the course. The computer games history segment is illustrated with a laboratory task. The development tool used for the course assignment is demonstrated during integrated tool presentations. Students are provided with support in the form of tutor supervision in Swedish in the computer rooms during their course assignment work.

## Disposition

Lectures and lessons.

## Course literature

Preliminary:

Andrew Rollings, Ernest Adams: Andrew Rollings and Ernest Adams on Game Design ISBN 1-5927-3001-9

Compendium with the lecturing slides used, partly containing additional information not covered in the course book

## Examination

- INL1 - Assignment, 3.0 credits, grading scale: P, F
- TEN1 - Examination, 4.5 credits, grading scale: A, B, C, D, E, FX, 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.

Written exam, 4,5 hp, grades A, B, C, D, E, Fx, F given.

Assignment carried out using designated development tool, 3 hp, presented at seminar specified in the course schedule, grades P, F given.

## Other requirements for final grade

To pass the course, the student needs to pass on both the written exam and the assignment. Final course grade is based on the grade of the written exam.

## 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.