# FHN3011 Gaming and Partici- patory Simulation for Research and Design 10.0 credits

**Spelsimulering inom forskning och utveckling**

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

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

## Establishment

Course syllabus for FHN3011 valid from Spring 2016

## Grading scale

## Education cycle

Third cycle

## Specific prerequisites

Proven experience in modelling, simulation or gaming, for instance from a previous course or practical experience.

## Language of instruction

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

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# Intended learning outcomes

After successful completion of the course, the student should be capable of the following:

- Differentiate between gamification, gaming simulation and entertainment games
- Assess what problems can be approached with a gaming simulation
- Understand and differentiate between gaming simulation for education, design, policy making and hypothesis testing
- Understand the limitations of gaming simulations and their validity requirements
- Identify the constituent parts of a gaming simulation
- Understand the process of conducting game-sessions, the different stages in game sessions, roles of facilitators, players and note-takers in game sessions
- Understand collection and analysis of data from game sessions for research purposes
- Draft the design specifications of a gaming simulation
- Be a contributing member in a game design team

## Course contents

The use of gaming as a method in research and design is rapidly growing as a succesful answer to the need for methods that incorporate multi-stakeholder perspectives with multi-disciplinarity and multi-scale problems. Within this course, we discuss and synthesize on the body of literature from the first wave of soft systems methodology in the early 1970's until the new wave of the last decennium. Both digital and analogue approaches are discussed. As part of the course, doctoral students will make a playable prototype of a gaming simulation

## Disposition

The course includes a range of seminar lectures and experience sharing. Furthermore there is literature study of a selection of papers, and the assignment to write a synthesis of this. All sessions incorporate mixed learning methods, including lectures, discussion and exercise.

During the course, students will develop a prototype game in groups, which will be presented at the end of the course.

## Course literature

Chapters from the books by Richard D. Duke and Raser
Selection of papers general for the course
Selection of papers specifically relevant for the PhD student

## Examination

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.

Written essay on gaming simulation approach relevant for own PhD studies, and successful completion of game design exercise.

## Other requirements for final grade

Pass / Fail Evaluation of all reflections handed in.
Pass / Fail evaluation of presentation of own game
Attendence of all lectures

## 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.