



## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### **DIT467 Technology-driven experimental gameplay design, 7.5 credits** Teknikdriven experimentell speldesign, 7,5 högskolepoäng *Second Cycle*

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#### **Confirmation**

This course syllabus was confirmed by Department of Computer Science and Engineering on 2020-11-25 to be valid from 2021-08-30, autumn semester of 2021.

*Field of education:* Science 100%

*Department:* Department of Computer Science and Engineering

#### **Position in the educational system**

The course is compulsory within the programme N2GDT. It is also a single subject course at the University of Gothenburg.

The course can be part of the following programme: 1) Game Design & Technology Master's Programme (N2GDT)

#### *Main field of studies*

Interaction Design

#### *Specialization*

A1F, Second cycle, has second-cycle course/s as entry requirements

#### **Entry requirements**

To be eligible for this course, students must have successfully completed the following courses, or equivalent:

- DIT455 Game Engine Architecture, 7.5 credits

Applicants must prove knowledge of English: English 6/English B or the equivalent level of an internationally recognized test, for example TOEFL, IELTS.

#### **Learning outcomes**

On successful completion of the course the student will be able to:

*Knowledge and understanding*

- list potential for new game mechanics and gameplay of two different technologies
- state creativity methods and techniques for applying new technologies to gameplay

*Competence and skills*

- develop and explore new gameplay produced by using new technologies
- present new aspects of a game's gameplay based upon the new technology used
- apply creativity methods on a new technology for creating new gameplay

*Judgement and approach*

- analyse potential advantages and disadvantages of various new technology-driven gameplay possibilities given the context of specific user groups
- assess ethical and societal issues of wide-spread adaptation of new technology-driven gameplay

**Course content**

Advances in computer game and game development are often tied intrinsically to the develop of new technology. However, the potential use of new technology is typically easier to identify regarding graphics, sound, networking, and even business aspects than regarding the core of a game, its game mechanics or gameplay. The course technology-driven experimental game design focuses upon developing skills for understanding and applying new technologies specially towards enabling new forms of gameplay.

Two currently relevant new technologies are introduced in the course (which technologies vary between years). Creativity methods are taught in the course as a preparation for applying these methods during the work on the specific technologies.

*Sub-courses***1. Project (Projekt), 7.5 credits**

Grading scale: Pass with distinction (5), Pass with credit (4), Pass (3) and Fail (U)

**Form of teaching**

The course is divided into two major modules and a smaller introductory module. The two major modules each focus on a technology which is on the cusp of being able to influence game development significantly within a couple of years. Each module introduces a technology through lectures, literature, and practice along with tools to allow gameplay experiments. The two major modules each contain a group submission and an individual submission. Group work usually takes place in groups of 5-6 students. The smaller introductory module goes through concepts and creativity methods for use

in the other modules.

*Language of instruction:* English

### **Assessment**

The smaller introductory component consists of an individual written submission. Each of the two major components consists of a group submission, an individual written submission and an oral presentation in a group.

The report in the introductory component and the oral presentations are either failed or passed. The group reports and the individual reports in the two major components use a grading scale for correction.

If a student, who has failed the same examined component twice, wishes to change examiner before the next examination, a written application shall be sent to the department responsible for the course and shall be granted unless there are special reasons to the contrary (Chapter 6, Section 22 of Higher Education Ordinance).

In cases where a course has been discontinued or has undergone major changes, the student shall normally be guaranteed at least three examination occasions (including the ordinary examination) during a period of at least one year from the last time the course was given.

### **Grades**

The grading scale comprises: Pass with distinction (5), Pass with credit (4), Pass (3) and Fail (U).

The final grade is based on the average grade of the group reports and the individual reports.

### **Course evaluation**

The course is evaluated through meeting after the course between teachers and student representatives. Further, an anonymous questionnaire is used to ensure written information. The outcome of the evaluations serves to improve the course by indicating which parts could be added, improved, changed or removed.

### **Additional information**

The courses DIT098 Gameplay Design and DIT248 Introduction to Game Research or equivalent are recommended.

The course is a joint course together with Chalmers.

Course literature to be announced the latest 8 weeks prior to the start of the course.

The course replaces the course DIT466, 7.5 hec. The course cannot be included in a degree which contains DIT466. Neither can the course be included in a degree which is based on another degree in which the course DIT466 is included.