UNIVERSITY OF GOTHENBURG

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DIT465 Technology-driven Experimental Game Design, 7.5 credits

Teknikdriven experimentell speldesign, 7,5 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by Department of Computer Science and Engineering on 2017-12-19 to be valid from 2018-08-19, autumn semester of 2018.

Field of education: Science 100%
Department: Department of Computer Science and Engineering

Position in the educational system

The course is compulsory within the Game Design & Technology Master's Programme.

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

Main field of studies	*Specialization*
Interaction Design	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:

- TIA248 Introduction to Game Research, 7.5 credits
- TIA098 Gameplay Design, 7.5 credits
- TIA265 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
- asses 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 novel forms of gameplay.

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

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 module consists of an individual written submission. Each of the two major modules consists of a group submission, an individual written submission and an oral presentation in a group.

The report in the introductory module and the oral presentations are either failed or passed. The group reports and the individual reports in the two major modules 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 (VG), Pass (G) and Fail (U).
To pass the course, approved results are required on all submissions as well as approved oral presentations.

The final grade for the course is based on the average of the assessment of the two major modules.

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 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 courses TIA108 Prototyping in interaction design, TIA106 Graphical interfaces, and TIA104 Interaction design methodology or equivalent are recommended.