

SERIOUS GAMES

code: 405097

credits 6

period: 1

lecturer(s): prof. dr. A. Eliëns,

aim: Serious games are more and more considered to be an effective means to bring about awareness, acquire skills, change behavior, and influence social patterns. With elementary game development technology, the students will explore the potential of serious games in a social context, using casual game mechanics, and what recently has been identified as the dynamics of gamification.

content: The course will cover the following topics:

- an introduction to game design
- practical skills in game development
- game mechanics and scoring mechanisms
- elementary game and utility theory
- media & communication theory
- game interaction patterns
- practical applications of serious games

Students are required to work in teams of 2-4 people, with as a goal the actual development of a serious game, with social network support.

course description: The course will take a multi-disciplinary approach, accommodating the variety in background and interests of the students, which may cover the range of game concept design, including social game dynamics, societal issues and game technology, including both programming, asset development and delivery and deployment issues.

Apart from theoretical lectures, there will be regular workshops and presentation sessions in which the students present their work and get feedback. For the basic assignment, consisting of a simple game world with first person interaction, the *unity* platform will be used. For the final assignment, a moderately complex serious game, students will have a choice of using

- the unity game development environment
- ximpel interactive video with minigames in flex/as3
- html5/canvas with javascript

The actual choice will depend on the technical background of the students, and previous experience.

form of tuition: lectures and practicum

literature: online reference material(s)

mode of assessment: essay and practicum assignment(s)

entry requirements: preferably, but not obligatory, *project interactive multimedia* and *multimedia authoring*

target audience: choice for master students CS, IS, and others, with an interest in multimedia and game development

remarks: The course will be given in english. For information see: www.cs.vu.nl/~eliens/serious