CIU240 Interaction, games and learning

Introduction
The course explores the intersection between interaction design, critical design, persuasive technology and gameplay design, i.e. how we can design artifacts (e.g. serious games) which promote learning, reflection and the changing of attitude or behavior. Focus is on interaction design and gameplay design in relation to learning, rather than on technology. The course consists of lectures, group work with seminars, and the design of a serious game in a project group.

Examination
The course is examined through two modules, namely:
1. Assignments, 3 credits (pass/fail): The game concept, the final game, and the report in the CHI-extended abstract format.
2. Individual exam with both practical and theoretical elements, 4,5 credits (fail,3,4,5)

Students are expected to take an active role in the discussions and analyses of texts and games by preparing presentations, questions, and comments.

Below, the different elements in the course are discussed along with the requirements for each moment.

1/11 Seminar: Learning perspectives
After the first introduction lecture and a presentation of several pedagogical perspectives you will play and discuss 5 serious games:
- Darfur is Dying (http://www.darfurisdying.com/)
- Algebots (http://www.games2train.com/testbuild/algebots/algebots.html) (the first level is playable)
- Immune Attack (http://www.fas.org/immuneattack/players-2)
- Lure of the Labyrinth (http://labyrinth.thinkport.org/www/)
- Sweatshop (http://www.littleloud.com/work/sweatshop/)

These games have to be categorized according to the given perspectives by giving answers to the following questions:
- What is the view on knowledge?
- What is the view on learning?
- What is the view on transfer?

At the seminar groups will be asked to present their analysis of a game. All games have to be analyzed and categorized within each group. Resources are the lecture material as well as Egenfeldt-Nielsens article.

Resources:
- Lecture notes

5/11 Seminar game analysis
The games that were analyzed in the previous seminar are now analyzed according to Becker’s Magic Bullet Model and Mitgutsch and Alvarado’s Serious Game Design Assessment Framework. At the seminar groups will be asked to present their analysis of one or more specific games based on one of the models/frameworks. Students are
expected to be active at the seminar by critically considering the other students’ analyses.

Resources:

12/11 10:00-11:00 Pitch
Each group will present its first ideas about the game they are going to design. Each group gets a maximum of five minutes to present:

- What is the target concept/purpose for the game?
- What are specific, measurable objectives for players to be able to achieve after playing the game?
- What are the first thoughts about the metaphor that ties the target objectives to the gameplay?
- What are the underlying assumptions about Knowledge, Learning and Transfer behind the game?

All students are expected to give constructive critique on the designs of the other groups.

15/11 8:00-10:00 Persuasive Games
Bring your laptop. We are going to take a look at several persuasive games (Superbetter, Plague, Killerflu) after having watched a presentation by Jane McGonical.

10/12 10:00-12:00 Final presentation of games
Each group will present their final game design including ideas for testing the game. Other groups as well as teachers will give feedback on the designs. Final reports have to be handed in at the end of the same day.

Game Design Project (Continuous)
An important part of the course is to develop and reflect on your own game. Course participants will be divided into groups of four/five. Each group will develop and describe its own serious game. The focus is not on the programming of the game but on deciding on learning goals and an approach to reach these goals. Groups can decide for themselves which programming language they want to use. Some programming languages that can be downloaded for free and which are suitable for beginners are:

- Scratch ([http://scratch.mit.edu/](http://scratch.mit.edu/))
Groups will have to present their first idea in a pitch on the 12th of November (see pitch). They will receive feedback on their idea which they will then develop into a working prototype. The final presentation of the game on the 10th of December as well as the report (to be handed in on the 10th of December at 17:00) are part of the group assessment. The report has to follow the guidelines for the CHI Student Game Design Competition: http://chi2013.acm.org/authors/call-for-participation/student-competitions/student-game-competition/

The report should be presented in the format for extended abstracts as required for the competition. The report should contain references to the given literature, as well as relevant literature gathered by the group.

**Literature [1-8]**