

CS798 Games for Health—Fall 2015

Administrivia

Course Objectives, Schedule, and Grading

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Course Objectives

- Review of current major applications of games in healthcare.
- Reading seminar and game design course.
- Case studies of representative health-related games: from “best-practices” to still pretty terrible.
- By the end of this course students should have:
 - Good understanding of current major topics in health-related games.
 - Appreciation of what makes for good “gamification” in healthcare.
 - Ability to apply good game design principles in healthcare applications.



Schedule of Topics

- Characteristics of serious games.
- Games versus gamification (panel).
- Board and card games.
- Exergaming and rehabilitation games.
- Cognitive and mental health.
- Games for children and youth.
- Social and virtual reality games.
- Narrative and storytelling.
- Class poster session.
- Public and global health.
- Final discussion: Serious games on sensitive subjects.



Canonical Reference—“Games for Good”

- Jane McGonigal, *Reality is broken: Why games make us better and how they can change the world*, Penguin Books, 2011.
- Multiple copies in DC Library. Overnight loan. Inexpensive to buy.
- Also see: <http://janemcgonigal.com>



References—Games for Health

- S. Arnab, I. Dunwell, and K. Debattista (eds), Serious games for healthcare: Applications and implications, 2013.
- K. Bredl and W. Bosche (eds), Serious games and virtual worlds in education, professional development, and healthcare, 2013.
- B. Schouten, S. Fedtke, T. Bekker, M. Schijven, and A. Gekker (eds), Games for health: Proceedings of the Third European Conference on Gaming and Playful Interaction in Health Care, 2013.
- Two copies of each reference in Davis Centre Library – short-term loan.



References and Resources—Game Design

- In-class workshops led by Jonathan Rodriguez, Games Institute researcher (Sept 25, Oct 9, Nov 6).
- Jesse Schell, The art of game design: A book of lenses, 2014.
- Jesse Schell, The art of game design: A deck of lenses, 2014. (Cards to accompany the book)
- Multiple copies of each in Davis Centre Library. 3-day loan.



Course Delivery

- Each session addresses a different genre of health game:
 - Case studies of representative games.
 - Research papers. Evaluations.
 - Individual or two-person presentations. Promoting discussion.
- Series of in-class workshops on game design:
 - Choosing a game design project idea. Forming teams.
 - In-progress: Developing the game prototype.
 - Games Institute mentoring.
- Final deliverables:
 - Game prototype (board, card, paper, digital) and walk-through.
 - Design document.
 - Poster.



Grading Breakdown

- 60% Course project—Game prototype (1–4 person team):
 - (5%) Project proposal (one page)—due Friday October 2.
 - (10%) In-class design workshops (Sept 25, Oct 9, Nov 6).
 - (10%) Poster presentation (**Thursday November 26**).
 - (35%) Design document—due Friday December 11.
- 30% Presentations of papers and case studies (1–2-person).
- 10% Participation (discussions, workshops, attendance).
- **Bonus:** (up to 5%) Individual “thinkpiece”.



Required Background

- No formal requirements.
- Interest in learning and critiquing state-of-the-art of health games: Challenges, successes, failures (and why).
- Where you might participate in this new field.
- Possible course project—real-world case study:
 - Collaboration between Games Institute and Centre for Addiction and Mental Health (CAMH).
 - CAMH interested in designing games to address difficult health issues for young people (problem drinking; mental health).
 - Project topic: Design aspects of these potential games:
 - Gamifying sensitive subjects.
 - Good game mechanics for serious (health) games.
 - Better models of interactive narrative for health games.
 - Interactions between narrative and game mechanics.
 - Integrating cognitive behaviour therapy into gameplay.
 - ... and more.



More Details

- Chrysanne Di Marco, DC1308, cdimarco@uwaterloo.ca
- Workshop leader: Jonathan Rodriguez, j2rodrig@uwaterloo.ca
- Course website: <http://www.cs.uwaterloo.ca/~cdimarco/cs798f15>
- **Note: Non-CS students can enrol starting Monday Sept 21.**
- Getting started:
 - Jane McGonigal, *Reality is broken: Why games make us better and how they can change the world*, Penguin Books, 2011.
 - Also see: <http://janemcgonigal.com>
- Excellent introduction to game studies on www.coursera.org:
 - “Understanding Video Games”, new session started Sept 1.
 - Thorough coverage of various aspects of game studies and design.
 - Extremely well-researched—extensive readings and references by game scholars and game designers.
 - History of videogames—huge number of case studies, demos.
 - No programming involved.

