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# GAMES FOR EDUCATION 8 GAME DESIGN



## 25-28 SETTEMBRE 2017

UNIVERSITÀ DI FOGGIA DIPARTIMENTO DI STUDI UMANISTICI LABORATORIO DI INFORMATICA - VIA ARPI. 176



#### Monday, 25 September

Morning - 10:00 - 13:00

- Game design fundamentals and terminology
- Storytelling, emergence, Flow,
   Economies, Balance, Achievements,
   Mechanics, Genres.

Iteration Iteration exercise

Afternoon - 14:00 - 17:00

- Tools and technologies
- Team structure and roles
- Iteration example (Last of Us AI)

Game design exercise

#### Tuesday, 26 September

Morning - 10:00 - 13:00

- Games for Change concept and categories
- Games and Learning theory
- Learning Theorists: Lev Vygotsky, Jean Piaget, James Paul Gee 36 principles

Afternoon - 14:00 - 17:00

Exercise: Identifying learning principles in today's games, present findings

#### Wednesday, 27 September

Morning - 10:00 - 13:00

- Games in the classroom theory
- Squire Off-the-shelf
- Games in the classroom examples
- Minecraft, Civilization, Age of Empires
- Games for teaching subject areas
- Early childhood: ABCMouse
- Biology, Chemistry, Physics -Kerbel space program, roller coaster designer, Happy Atoms (Schell)
- Mathematics Algebra Dragonbox,
   Calc-Variant
- Social studies Carmen San Diego, Oregon Trail
- Early Coding/Problem Solving –
   Code Combat, Water Bears
- FIEA GameLab games

Morning Exercise: Play select games

Afternoon - 14:00 - 17:00

- Process of creating games to be used in classroom (Standards, Purchasing processes)
- Books -> e-books -> richer ebooks -> games

Exercise

(subject matter expert supplies content, participants designs game to teach, present)

#### Thursday, 28 September

Morning - 10:00 - 13:00

Games for training examples - medical, janitorial, mechanics Games in the workplace examples
Interactive installations for educating public - museums, theme parks
AR/VR - the future, escape rooms, etc McGonigal reality is broken

Afternoon - 14:00 - 17:00

Exercise
(subject matter expert from local museum, design interactive piece for existing non-interactive exhibit, present)