Content

| Course Code | Course Name | Semester | Theory | Practice | Lab | Credit | ECTS |
|-------------|---------------------|----------|--------|----------|-----|--------|------|
| JOU409 | Digital Game Design | 7 | 3 | 0 | 0 | 3 | 3 |

| Prerequisites | |
|------------------------|--|
| Admission Requirements | |

| Language of Instruction | Turkish |
|-------------------------|---|
| Course Type | |
| Course Level | Bachelor Degree |
| Objective | In this course, it is aimed to provide students evaluate diverse digital games in terms of form, content and process management. Firstly, by examining the historical progress of digital games, their current position as "high-budget productions" will be discussed. Simultaneously, advancement and wide-spreading course of Web-based games will be observed, specific and characteristic properties of successful and popular games will be examined. Notions like story, target audience, rules, graphics, levels, user experience will be explained in-depth and games from various genres will be studied and criticised. On the other hand, by briefly mentioning of concept of software metrics, ability of compare game projects quantitatively in terms of "size" will be provided. Subsequently, processes of digital game design will be inspected step by step and roles of game project development team will be defined. During the semester, student will carry out a reasonable sized project and consequently will internalize development stages by practice. |
| Content | Week 1: Introduction, Core Concepts, Digital Game Genres and Platforms Week 2: Game Design In General Rules, Play, Culture Design Process Meaningful Play Design Systems Interactivity History of Digital Games and Popularization of Web Games Video games until '80s Game consoles in Pre-Internet era Cult video games Modern game consoles and popular games |
| | Modern game consoles and popular games Browser games Flash based Plain-text based Facebook games Mobile games (Java, iOS, Android) Week 3: First steps of Digital Game Design Determination of target audience and platform Establishment of general concept Requirement Analysis |
| | Game Proposal / Concept Document Week 4: |

Story Environment design Storyboard practice Linear story vs. Open world Characters

Week 5: Game Mechanism Setting the rules Level design and difficulty settings Control interfaces and user experience

Week 6:

Design and Development Tools Game software development kits Physics engines Graphical design tools Storyboard applications

Week 7:

Visual and Graphics Concept art and sketches Characters, environments and objects Animations Menus and other graphical interfaces

Week 8: Audio Music and scores Sound effects Voice acting

Week 9: Project Team Producer Game / level designer Writer Programming Team Testing team

Week 10: Project lifecycle and documents Concept design and proposal document Pre-production Game design document Art production plan Technical design document Project plan Prototype Development Alpha / Beta tests Updates and patches

Week 11-12: Workshop: Making a Prototype on Construct2 environment

| | Week 13-14: |
|------------|---|
| | Student Presentations |
| References | Rules of Play: Game Design Fundamentals, Katie Salen, Eric Zimmerman, 2003, MIT Press |
| | Game Design: The Art and Business of Creating Games (2nd Edition), Bob Bates, 2001, Prima Tech. |
| | Gameplay and Design, Kevin Oxland, 2004, Addison Wesley |
| | Game Design: Theory and Practice, Richard Rouse, 2001, Wordware |

Theory Topics

| Week | Weekly Contents | |
|------|---|--|
| 1 | Introduction, Core Concepts, Digital Game Genres and Platforms | |
| 2 | Game Design In General & History of Digital Games and Popularization of Web Games | |
| 3 | First steps of Digital Game Design | |
| 4 | Story | |
| 5 | Game Mechanism | |
| 6 | Design and Development Tools | |
| 7 | Visual and Graphics | |
| 8 | Audio | |
| 9 | Project Team | |
| 10 | Project lifecycle and documents | |