



Digital Gaming & Simulation

Houston Community College – Southwest

GAME 1370 – Concept Design and Evolution of Electronic Games

Prerequisites: Departmental Approval

Credits: 3 (2 lecture, 4 lab)

An introduction to game and simulation development. Analysis of existing applications and their play elements. In-depth coverage of the elements of the application and examination of social issues, genres and trends. Creation of design documents. Investigation of why people play games. Review of the technological and cultural history of electronic games. Survey of the major innovators and historical figures of the industry. Examination of the trends and taboos that motivate game design.

Topic	Approximate Hours
Overview	2
History of Electronic Games <ul style="list-style-type: none"> ▪ Major game innovators ▪ Trends and Taboos Player Motivations Designer Motivations	8
Game Concepts <ul style="list-style-type: none"> ▪ Getting an Idea ▪ The elements of a game Understanding the audience	6
Game Setting and Worlds <ul style="list-style-type: none"> ▪ Purpose of a game setting ▪ Dimensions of the game world ▪ Realism and abstraction 	6
Storytelling and Narrative	6
Game play	6
Genres of games <ul style="list-style-type: none"> ▪ Action Games ▪ Strategy Games ▪ Role-Playing Games ▪ Sports Games ▪ Vehicle/ Other Simulation ▪ Adventure Games ▪ Online Game ▪ Other 	6
Explore the different job functions <ul style="list-style-type: none"> ▪ Producer/Director, ▪ Lead Programmer, Programmer ▪ Lead Artist, Artist (Modeler, Texture Artist, Animator, Concept Artist) ▪ Lead Designer ▪ Game Designer ▪ Level Designer ▪ Test Lead, Game Tester ▪ Audio Director (Sound Engineer, Audio Technicians) 	6

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GAME 1370 – Concept Design and Evolution of Electronic Games... *Continued*

Topic	Approximate Hours
Production Process <ul style="list-style-type: none"> ▪ Concept and Pre-production ▪ Technical Design Document (TDD) ▪ Production phases ▪ Post Production 	6
Analyze existing games and simulations <ul style="list-style-type: none"> ▪ Play elements ▪ Social issues Analyze platforms for games and simulations <ul style="list-style-type: none"> ▪ Location Based Entertainment (LBE) ▪ PC, Console, Mobile, simulators 	12
Exposure to open engines <ul style="list-style-type: none"> ▪ Modify game world characteristic (gravity, friction, speed, lighting, etc.) ▪ Modify textures of in game characters or objects. 	8
Game modification Game development environments	6
Research existing games and simulations Analyze a game or simulation Present the findings	6
Concept and Design document <ul style="list-style-type: none"> ▪ Develop a concept document for the solo project ▪ Jointly develop the concept document for the team project. 	12
Total (lectures, labs and exams)	96