

Fall 2015

Game Production Design

470420-1
Fall 2015
09/01/2015
Kyoung Shin Park
Multimedia Engineering
Dankook University

Course Information

- Course
 - Game Production (470420-1)
 - Fall 2015, 3 credits, 3 hours
 - Course hour & room: Tuesday 10,11,12 Thursday 5,6,7 (2nd Science Hall #313-01)
- Instructor
 - Kyoung Shin Park
 - kpark@dankook.ac.kr
 - 010-8636-1960 (mobile)
 - The Third Science Hall, Room 417
 - Office hour: Tuesday 11:00-12:00
- Prerequisites
 - Game programming

2

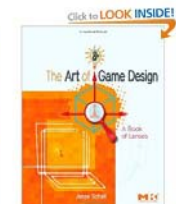
Purpose

- This course will provide an introduction to fundamental and advanced game design and programming techniques.
- In this course, students will form project groups to design and develop a simple computer games.
- Topics include video game history, software architecture for games, gameplay design, game graphics, interface, networking issues, etc.

3

Text Book

- Text Book
 - Core Techniques and Algorithms
 - Daniel Sanchez-Crespo Dalmau
 - 34,000 Won
- Reference Book
 - Game Architecture & Design: A NEW EDITION
 - Andrew Rollings, Dave Morris,
 - 29,000 Won
 - The Art of Game Design
 - Jesse Schell
 - 30,000 Won



Evaluation

- Attendance : 20%
- Final Exam: 20 %
 - There will be a final take-home exam that covers all the subjects discussed in the classroom.
- Individual Assignment: 30%
 - Individual class assignment
 - Paper reading & summary report
 - Presentation
- Term Project: 30%
 - Survey & brainstorming & storyboarding
 - Midterm progress report & presentation
 - Final report & presentation
- Class Participation & Attitude: extra 10 %

Topics

- Overview
- Gameplay
- Game Graphics
- Game Software Architecture Design
- Game Human-Computer Interaction
- Game Sound Design
- Game AI
- Game Physics
- Networked Game

6

Schedule

- 09/01 : Course Overview & Survey
- 09/03 : History of video games (chap 1)
- 09/08 : Introduction to Term Project (Mobile VR game)
- 09/10 : Ludology & Understanding Fun
- 09/15 : IA1 (Reading summary report & presentation)
- 09/17 : Designing the Game
- 09/22 : IA2 (Virtual Reality game survey & presentation)
- 09/24 : TP1 (Term project – Mobile Virtual Reality game modification)
- 09/29 : 추석 (no class)

7

Schedule

- 10/01 : Gameplay Brainstorming
- 10/06 : TP2 (Term project game brainstorming)
- 10/08 : Software Architecture of Game (chap 2 & 6)
- 10/13 : TP3 (Term project game storyboarding)
- 10/15 : Introduction to CG (chap 11 & 12)
- 10/20-22 : IA3 (Midterm Presentation)
- 10/27 : Sound Design (chap 5)
- 10/29 : TP4 (Term project game tech support)
- 11/03 : Human-Computer Interaction (chap 5)
- 11/05 : TP5 (Term project game UI design)
- 11/10 : Game AI (chap 6, 7, 8)
- 11/12 : TP6 (Term project game AI design) ⁸

8

Schedule

- 11/17 : Networked Game Development (chap 10)
- 11/19 : TP7 (Term project collaborative interface design)
- 11/24 : Game Physics (chap 19)
- 11/26 : TP8 (Term project physics design)
- 12/01 : Introduction to stereoscopic computer graphics
- 12/03 : Introduction to stereoscopic computer graphics
- 12/08 : Special Effects (chap 15, 17, 18)
- 12/10 : TP9 (Term project final design document)
- 12/16-18 : IA4 (Final Exam)

9

Individual Assignment

- Reading summary report
 - 1-page report
- Mobile VR game survey
 - 5~10 min presentation & discussion
 - 3~5 page (single-space, 10-point font) report
- Mobile VR interaction presentation
 - 15~20 min presentation & discussion
 - 5~10-page (single-space, 10-point font) report

10

Term Project

- Topic: 'Mobile VR Game' Development
- Students are encouraged to work on a project related to your own area of interest
 - Game idea brainstorming
 - Game survey
 - Term project critique & group members evaluation
 - Extra Credit 10% - paper reading & presentation
- Projects can be done as groups of two or three.
- Also, the project report should indicate to which portions of the project each member contributed.
- You group project blog will also help monitor your steady progress across the semester.
- Also, the final project report should indicate to which portions of the project each member contributed.

12

Term Project

- Game modification
- Game brainstorming & storyboarding
- Game technology support & UI & AI & physics design
 - 10~15 min presentation & discussion
 - 5~10-page (single-space, 10-point font) report
- Final design document
 - 20 min presentation & demonstration
 - 10-page (single-space, 10-point font) report

Term Project Groups

- 1 group-
- 2 group-
- 3 group-
- 4 group-

13

Term Project Theme

- 2007 Topic – ‘Serious Game’ Development
- 2008 Topic – ‘전통 문화 및 민속 놀이 교육을 위한 박물관 공간형 콘텐츠’
- 2009 Topic – ‘Mobile Location-Based System Game’ Development
- 2010 Topic - ‘Mobile AR Game’ Development
- 2012 Topic – ‘Large High-Resolution Display Gesture-based Game’ Development
- 2013 Topic – ‘Single display multiplayer gesture/mobile game’ Development
- 2015 Topic – ‘Mobile VR ExerGame’ Development

14

Term Project Groups

- Term Project Group (9/15)
 - Company name
 - Game name & concept
 - Group member's name & contact information

15

Announcement

- Class blog:
<http://dis.dankook.ac.kr/lectures/gd15/>
- Reading summary (1~2-page) & presentation due by 9/16



16