112-2 Full Curriculum of Da-Yeh University

Information			
Title	Game Programming	Serial No./ID	0458 /MDI2019
Required/Credit	Optinal /3	Time/Place	(Fri)234 /H615
Language	Chinese	Grade Type	Number
Lecturer /Full- or Part-time	JHENG-WEI,YANG /Part-time	Graduate Class	Non-graduating Class
School System /Dept /Class, Grade	Bachelor /Bachelor Program for Multimedia Digital Content /Class 1, Grade 2		
Office Hour / Place	n.a.		
Lecturer	n.a.		

Introduction

This course is designed to help students understand the design flow and techniques of implementing digital game system, and guide students to design simple digital games. The specific course objectives are as follows:
1. Enable students to understand the programming skills of Unity based digital games.
2. Cultivate the capability of implementing basic digital game system.

Outline

1.Introduction of Unity game programming language
2.Introduction of Unity game programming flow
3.Implementation of Unity game system
4.Introduction to application of Unity Playmaker

Prerequisite

Introduction to game design

The Relationship Between Courses and Departmental Core Competencies and Basic Skills

- Acquire professional knowledge of multimedia digital content design
- Acquire the technologies, skills and the capability of using modern tools for practicing multimedia digital content design
- Acquire the capability of integrating multimedia digital content knowledge and technologies
- Acquire the capability of finding out, analyzing and solving complex interdisciplinary multimedia design problems

  Acquire the capability of managing project, communicating each other, respecting different viewpoints and cooperating within the team
- Acquire the capability of lifetime learning。

  Acquire the capability of collecting, interpreting and analyzing global multimedia industry trends, and

participating in multimedia practical design。

Acquire professional working ethics and society responsibility

- Acquire the humanities and arts accomplishment, and the capability of creative thinking and innovative design。

Teaching Plan						
Core Capability	Weight(%)【A】	Ability index(Performance Indicators)	Teaching Methods	Assessment and Weight	Core Competency Learning Outcomes【B】	Final Exam Grades【C=B*A】
Acquire professional knowledge of multimedia digital content design	30	Cultivate the capability of realizing multimedia digital content theory。 Cultivate the capability of being familiar with multimedia digital content knowledge。 Cultivate the capability of being possessed of multimedia digital content professional knowledge, including animation, comic, game design, and so on。 Cultivate the capability of being possessed of multimedia digital content design quality and accomplishment, including cultural creativity, art, esthetics, and so on。	Lecturing Practical Operation (Experiment, Machine Operation	Homework Assignment: 100%	Total: 100	30
Acquire the technologies, skills and the capability of using modern tools for practicing multimedia digital content design	30	Cultivate the capability of being possessed of and applying multimedia digital content professional design technologies and skills。 Cultivate the capability of using modern multimedia software and hardware tools。 Cultivate the capability of implementing multimedia digital content system。	Lecturing Practical Operation (Experiment, Machine Operation	Final Exam: 100%	Total: 100	30

Acquire the capability of integrating multimedia digital content knowledge and technologies	15	Cultivate the capability of integrating theoretical knowledge and practical technology。 Cultivate the capability of integrating visual communication, information technology and content management knowledge。	Lecturing Practical Operation (Experiment, Machine Operation	Product Manufacturing: 100%	Total: 100	15
Acquire the capability of finding out, analyzing and solving complex interdisciplinary multimedia design problems	10	Cultivate the capability of exploring complex multimedia design problems。 Cultivate the capability of analyzing and organizing complex multimedia design problems。 Cultivate the capability of solving and practicing complex multimedia design systems。	Lecturing Practical Operation (Experiment, Machine Operation	Product Manufacturing: 100%	Total: 100	10
Acquire the humanities and arts accomplishment, and the capability of creative thinking and innovative design 。	10	Cultivate the humanities and arts accomplishment 。 Cultivate the capability of creative thinking。 Cultivate the capability of innovative design。	Lecturing Practical Operation (Experiment, Machine Operation	Course Participation: 100%	Total: 100	10
Acquire the capability of lifetime learning 。	5	Cultivate the capability of lifetime learning by different ways。	Lecturing Practical Operation (Experiment, Machine Operation	Product Manufacturing: 100%	Total: 100	5

Grade Auditing

Homework Assignment: 30%
Final Exam: 30%
Product Manufacturing: 30%
Course Participation: 10%

Book Type (Respect intellectual property rights. Please use official textbooks and do not illegally photocopy others' works.)		
Book Type	Book name	Author
Reference Books	Unity 3D遊戲設計實戰（第三版）	邱勇標

Lesson Plan		
Weeks	Content	Teaching Methods
1	Unity基礎程式架構1 & Intellectual Property Protection (use legitimate textbooks only) & Traffic safety Propaganda	Lecturing、 Practical Operation (Experiment, Machine Operation
2	Unity基礎程式架構2	Lecturing、 Practical Operation (Experiment, Machine Operation
3	Unity基礎程式架構3	Lecturing、 Practical Operation (Experiment, Machine Operation
4	Unity基礎程式架構4	Lecturing、 Practical Operation (Experiment, Machine Operation
5	Unity基礎程式架構5	Lecturing、 Practical Operation (Experiment, Machine Operation
6	Unity基礎程式架構6	Lecturing、 Practical Operation (Experiment, Machine Operation
7	Unity基礎程式架構7	Lecturing、 Practical Operation (Experiment, Machine Operation
8	Unity基礎程式架構8	Lecturing、 Practical Operation (Experiment, Machine Operation
9	期中考	Practical Operation (Experiment, Machine Operation
10	Unity基礎程式架構9	Lecturing、 Practical Operation (Experiment, Machine Operation
11	Unity基礎程式架構10	Lecturing、 Practical Operation (Experiment, Machine Operation
12	Unity基礎程式架構11	Lecturing、 Practical Operation (Experiment, Machine Operation
13	Unity基礎程式架構12	Lecturing、 Practical Operation (Experiment, Machine Operation
14	Unity基礎程式架構13	Lecturing、 Practical Operation (Experiment, Machine Operation

15	Unity基礎程式架構14	Lecturing、 Practical Operation (Experiment, Machine Operation
16	Unity基礎程式架構15	Lecturing、 Practical Operation (Experiment, Machine Operation
17	Unity基礎程式架構16	Lecturing、 Practical Operation (Experiment, Machine Operation
18	期末考	Practical Operation (Experiment, Machine Operation