

109-1 Full Curriculum of Da-Yeh University

Information			
Title	Introduction to Game Design	Serial No./ID	0652 /MDI2026
Required/Credit	Required /3	Time/Place	(Mon)234 /PX302
Language	Chinese	Grade Type	Number
Lecturer /Full- or Part-time	Cherng Jong Sheng /Full-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	(Tue) 10:10~11:00, (Tue) 11:10~12:00, (Tue) 13:20~14:10, (Tue) 14:20~15:10 / H318		
Lecturer	n.a.		

Introduction

本課程主要在協助學生了解數位遊戲設計流程與技巧，並引導學生設計製作數位遊戲，以奠定其數位遊戲設計基礎。其具體課程目標是讓學生了解Unity 3D數位遊戲的製作流程及技巧，與培養實際撰寫遊戲程式設計的能力。

Outline

- 1.Unity 3D遊戲引擎介紹
- 2.3D數位遊戲企劃製作
- 3.Unity 3D遊戲場景建置
- 4.Unity 3D遊戲程式設計
- 5.Unity 3D數位遊戲設計實作

Prerequisite

基礎程式設計，遊戲設計導論

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。	Practical Operation (Experiment, Machine Operation Lecturing Group Work	Record on Experiment: 40% Product Manufacturing: 30% Course Participation: 20% Written Report: 10%	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 Group Work	Course Participation: 20% Product Manufacturing: 30% Record on Experiment: 40% Written Report: 10%	Total: 100	30

Acquire the capability of integrating multimedia digital content knowledge and technologies	10	Cultivate the capability of integrating theoretical knowledge and practical technology。 Cultivate the capability of integrating visual communication, information technology and content management knowledge。	Practical Operation (Experiment, Machine Operation Lecturing Group Work	Record on Experiment: 40% Product Manufacturing: 30% Course Participation: 20% Written Report: 10%	Total: 100	10
Acquire the humanities and arts accomplishment, and the capability of creative thinking and innovative design。	15	Cultivate the capability of innovative design。 Cultivate the capability of creative thinking。 Cultivate the humanities and arts accomplishment 。	Lecturing Practical Operation (Experiment, Machine Operation Group Work	Course Participation: 20% Product Manufacturing: 30% Record on Experiment: 40% Written Report: 10%	Total: 100	15
Acquire the capability of lifetime learning 。	5	Cultivate the capability of lifetime learning by different ways。	Lecturing Practical Operation (Experiment, Machine Operation Group Work	Course Participation: 20% Product Manufacturing: 30% Written Report: 10% Record on Experiment: 40%	Total: 100	5
Acquire the capability of collecting, interpreting and analyzing global multimedia industry trends, and participating in multimedia practical design。	10	Cultivate working proficiency in career of multimedia digital content。 Cultivate the capability of great foresight and international view。 Cultivate the capability of understanding the effects of multimedia design to industries, societies, and worldwide。 Cultivate the capability of solving industry actual problem。 Cultivate the capability of realizing the global industrial issues of multimedia digital content。	Lecturing Practical Operation (Experiment, Machine Operation Group Work	Course Participation: 20% Record on Experiment: 40% Product Manufacturing: 30% Written Report: 10%	Total: 100	10

Grade Auditing

Record on Experiment: 40%

Product Manufacturing: 30%

Course Participation: 20%

Written Report: 10%

Book Type (Respect intellectual property rights. Please use official textbooks and do not illegally photocopy others' works.)

Book Type	Book name	Author
Instructor-compiled	none	none

Lesson Plan

Weeks	Content	Teaching Methods
1	Introduction to Unity game engine & 智財權宣導(含告知學生應使用正版教科書)	Lecturing、 Practical Operation (Experiment, Machine Operation
2	Digital game design planning(1)	Lecturing、 Practical Operation (Experiment, Machine Operation
3	Digital game design planning(2)	Lecturing、 Practical Operation (Experiment, Machine Operation
4	Digital game design planning(3)	Lecturing、 Practical Operation (Experiment, Machine Operation
5	Unity 3d game scene design(1)	Lecturing、 Practical Operation (Experiment, Machine Operation
6	Unity 3d game scene design(2)	Lecturing、 Practical Operation (Experiment, Machine Operation
7	Unity 3d game scene design(3)	Lecturing、 Practical Operation (Experiment, Machine Operation
8	Unity 3d game programming(1)	Lecturing、 Practical Operation (Experiment, Machine Operation
9	Midterm	Practical Operation (Experiment, Machine Operation、 Special Report
10	Unity 3d game programming(2)	Lecturing、 Practical Operation (Experiment, Machine Operation
11	Unity 3d game programming(3)	Lecturing、 Practical Operation (Experiment, Machine Operation

12	Unity 3d game programming(4)	Lecturing、 Practical Operation (Experiment, Machine Operation
13	Simple Unity 3d game design(1)	Lecturing、 Practical Operation (Experiment, Machine Operation
14	Simple Unity 3d game design(2)	Lecturing、 Practical Operation (Experiment, Machine Operation
15	Simple Unity 3d game design(3)	Lecturing、 Practical Operation (Experiment, Machine Operation
16	Simple Unity 3d game design(4)	Lecturing、 Practical Operation (Experiment, Machine Operation
17	Simple Unity 3d game design(5)	Lecturing、 Practical Operation (Experiment, Machine Operation
18	Final	Practical Operation (Experiment, Machine Operation、 Special Report