113-2 Full Curriculum of Da-Yeh University

Information			
Title	Game Environment Design	Serial No./ID	0373 /MDI3023
Required/Credit	Optinal /2	Time/Place	(Thu)34 /H615
Language	Chinese	Grade Type	Number
Lecturer /Full- or Part-time	/Part-time	Graduate Class	Non-graduating Class
School System /Dept /Class, Grade	Bachelor /Bachelor Program for Multimedia Digital Content /Class 1, Grade 3		
Office Hour / Place	n.a.		
Lecturer	、JHENG-WEI,YANG		

Introduction

This course is design to help students in understanding the design processes and skills of digital game environments, and guide students to design digital game environments. The specific goal is to make students understand different digital game environment characteristics and design processes, and bring up the foundation of environment design and the ability of practical design.

Outline

1.Introduction to digital game environment
2.Introduction to digital game environment design flows and related softwares
3.Basic digital game environment design
4.Maya digital game environment implementations
5.Unity digital game environment implementations

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。	Case Study Lecturing Practical Operation (Experiment, Machine Operation	Product Manufacturing: 30% Homework Assignment: 30% Final Exam: 30% Record on Experiment: 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 Case Study Practical Operation (Experiment, Machine Operation	Final Exam: 30% Homework Assignment: 30% Product Manufacturing: 30% Record on Experiment: 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。	Case Study Lecturing Practical Operation (Experiment, Machine Operation	Product Manufacturing: 30% Homework Assignment: 30% Final Exam: 30% Record on Experiment: 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 Case Study Practical Operation (Experiment, Machine Operation	Final Exam: 30% Homework Assignment: 30% Product Manufacturing: 30% Record on Experiment: 10%	Total: 100	15
Acquire the capability of lifetime learning。	5	Cultivate the capability of lifetime learning by different ways。	Lecturing Case Study Practical Operation (Experiment, Machine Operation	Final Exam: 30% Homework Assignment: 30% Record on Experiment: 10% Product Manufacturing: 30%	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 Case Study Practical Operation (Experiment, Machine Operation	Final Exam: 30% Product Manufacturing: 30% Homework Assignment: 30% Record on Experiment: 10%	Total: 100	10

Grade Auditing

Homework Assignment: 30%
Product Manufacturing: 30%
Final Exam: 30%
Record on Experiment: 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	class introduction & Intellectual Property Protection (use legitimate textbooks only) & Traffic safety Propaganda & Gender equality education promotion	Lecturing、 Practical Operation (Experiment, Machine Operation
2	spine-Interface and Introduction	Lecturing、 Practical Operation (Experiment, Machine Operation
3	spine-skeleton setup 1	Lecturing、 Practical Operation (Experiment, Machine Operation
4	spine-skeleton setup 2	Lecturing、 Practical Operation (Experiment, Machine Operation
5	spine-weight adjustment	Lecturing、 Practical Operation (Experiment, Machine Operation
6	spine-animation production 1	Lecturing、 Practical Operation (Experiment, Machine Operation
7	spine-animation production 2	Lecturing、 Practical Operation (Experiment, Machine Operation
8	spine- output results	Lecturing、 Practical Operation (Experiment, Machine Operation
9	midterm exam	Practical Operation (Experiment, Machine Operation
10	Unity scene design - terrain	Lecturing、 Practical Operation (Experiment, Machine Operation

11	Unity scene design - collision	Lecturing、 Practical Operation (Experiment, Machine Operation
12	Unity scene design - sky	Lecturing、 Practical Operation (Experiment, Machine Operation
13	Unity scene design - architecture	Lecturing、 Practical Operation (Experiment, Machine Operation
14	Unity scene design - lighting	Lecturing、 Practical Operation (Experiment, Machine Operation
15	Unity scene design - sound effects	Lecturing、 Practical Operation (Experiment, Machine Operation
16	Unity scene design - fog	Lecturing、 Practical Operation (Experiment, Machine Operation
17	Practical case discussion & Flexible Teaching/Learning	Flexible Teaching - Communication and Interaction
18	Practical case discussion & Flexible Teaching/Learning	Flexible Teaching - Communication and Interaction