

108-2 Full Curriculum of Da-Yeh University

Information			
Title	3D Texture and Lighting	Serial No./ID	0697 / MDI1024
Required/Credit	Optinal /2	Time/Place	(Wed)56 /PX304
Language	Chinese	Grade Type	Number
Lecturer /Full- or Part-time	/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	(Mon) 12:00~13:20, (Mon) 13:20~14:10, (Tue) 12:00~13:20, (Wed) 12:00~13:20 / Px301		
Lecturer	、		

Introduction
Convergence 3D model production, teaching MAYA lighting settings and material design, as well as basic sub-layer concept and synthesis techniques

Outline
1. MAYA basic lighting introduced 2. Indoor and outdoor lighting design 3. Mapping settings 4. Calculation engine 5. production ray material application 6. Hierarchical calculation settings 7. Synthesis concept and application

Prerequisite
Must have MAYA modeling foundation

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 creative thinking and innovational design
 Acquire the capability of managing project, communicating each other, respecting different viewpoints and cooperating within the team

-  Realize the industrial issues and understand the effects of multimedia design to industries, social ecology and economy, and worldwide
 -  Acquire the capability of lifetime learning
 -  Acquire professional working ethics and society responsibility
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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	20	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 Cultivate the capability of realizing multimedia digital content theory	Practical Operation (Experiment, Machine Operation Lecturing Film Appreciation	Course Participation: 10% Homework Assignment: 30% Final Exam: 30% Product Manufacturing: 30%	Total: 100	20
Acquire the technologies, skills and the capability of using modern tools for practicing multimedia digital content design	10	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 Film Appreciation	Course Participation: 10% Homework Assignment: 30% Final Exam: 30% Product Manufacturing: 30%	Total: 100	10

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	Lecturing Film Appreciation Practical Operation (Experiment, Machine Operation Group Discussion	Final Exam: 30% Homework Assignment: 30% Course Participation: 10% Product Manufacturing: 30%	Total: 100	10
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	Practical Operation (Experiment, Machine Operation Group Discussion Lecturing Film Appreciation	Final Exam: 30% Homework Assignment: 30% Course Participation: 10% Product Manufacturing: 30%	Total: 100	10
Acquire the capability of creative thinking and innovational design	10	Cultivate the capability of creative thinking Cultivate the capability of innovational design	Case Study Lecturing Practical Operation (Experiment, Machine Operation Film Appreciation	Final Exam: 30% Homework Assignment: 30% Product Manufacturing: 30% Course Participation: 10%	Total: 100	10
Acquire the capability of managing project, communicating each other, respecting different viewpoints and cooperating within the team	10	Cultivate the capability of communication, coordination, and team cooperation Cultivate the capability of project planning, execution and management Cultivate the capability of respecting different viewpoints	Practical Operation (Experiment, Machine Operation Group Discussion Lecturing Film Appreciation	Course Participation: 10% Homework Assignment: 30% Final Exam: 30% Product Manufacturing: 30%	Total: 100	10

Realize the industrial issues and understand the effects of multimedia design to industries, social ecology and economy, and worldwide	10	Cultivate the capability of understanding the effects of multimedia design to industries, societies, and worldwide Cultivate the capability of realizing the industrial issues of multimedia digital content Cultivate the capability of great foresight and international view Cultivate the capability of solving industry actual problem Cultivate working proficiency in career of multimedia digital content	Practical Operation (Experiment, Machine Operation Group Discussion Lecturing Film Appreciation	Course Participation: 10% Homework Assignment: 30% Final Exam: 30% Product Manufacturing: 30%	Total: 100	10
Acquire the capability of lifetime learning	10	Cultivate the capability of lifetime learning by different ways	Lecturing Case Study Practical Operation (Experiment, Machine Operation Film Appreciation	Final Exam: 30% Homework Assignment: 30% Course Participation: 10% Product Manufacturing: 30%	Total: 100	10
Acquire professional working ethics and society responsibility	10	Cultivate the accomplishment of being possessed of well human relationship and career ethics Cultivate the accomplishment of being possessed of society responsibility in professional field	Lecturing Group Discussion Practical Operation (Experiment, Machine Operation Film Appreciation	Final Exam: 30% Course Participation: 10% Homework Assignment: 30% Product Manufacturing: 30%	Total: 100	10

Grade Auditing

Homework Assignment: 30%

Final Exam: 30%

Product Manufacturing: 30%

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

Book Type	Book name	Author
Instructor-compiled	Arnold rendering for maya	李中魁

Lesson Plan

Weeks	Content	Teaching Methods
1	Basic interface introduction & Intellectual Property Protection (use legitimate textbooks only) & Traffic safety Propaganda	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation
2	Maya Arnold lighting introduction_1	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation
3	Maya Arnold lighting introduction_2	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation
4	Maya Arnold shader introduction_1	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation
5	Maya Arnold shader introduction_2	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation
6	Maya Arnold rendering settings introduction_1	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation 、 Film Appreciation
7	Maya Arnold rendering settings introduction_2	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation
8	Maya Arnold Physics Light Play_1	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation
9	Midterm exam	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation
10	Maya Arnold Physics Light Play_2	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation
11	Maya Arnold outdoor example application_1	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation 、 Film Appreciation
12	Maya Arnold Outdoor Example Application_2	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation 、 Film Appreciation

13	Maya Arnold indoor example application_1	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation 、 Film Appreciation
14	Maya Arnold indoor example application_2	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation 、 Film Appreciation
15	Maya Arnold advanced comprehensive use_1	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation 、 Film Appreciation
16	Maya Arnold Advanced Comprehensive Application_2	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation 、 Film Appreciation
17	Delamination and foundation synthesis	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation 、 Film Appreciation
18	Final exam	Lecturing、 Case Study、 Practical Operation (Experiment, Machine Operation