

佛光大學 課程大綱 Course Outline

課程名稱 Course Name in Chinese	電腦輔助設計（一）				
英文課程名稱 Course Name in English	Computer-Aided Design(I)				
科目代碼 Course Code	PM251			班別 Degree	<input checked="" type="checkbox"/> 學士班 Undergraduate Program <input type="checkbox"/> 碩士班 Masters Program <input type="checkbox"/> 博士班 PhD Program
學分數 Credit	3	時數 Hour	3	修別 Type	<input type="checkbox"/> 必修 Required <input checked="" type="checkbox"/> 選修 Elective
學程別 Program	<input type="checkbox"/> 通識教育 General Education <input type="checkbox"/> 院基礎 Foundation <input type="checkbox"/> 跨領域 Interdisciplinary <input type="checkbox"/> 系核心 Core <input checked="" type="checkbox"/> 學系專業選修 Specialized Elective				
先修課程 prerequisite					
課程描述 Course Description					
The course emphasizes the computer-assisted design capability by technology and information tool. By the construction of 3D model, product design and animation media design are developed					
課程目標 Course Objectives					
1. Be familiar with operational interface of computer-assisted design software 2. Be familiar with basic image kits and model construction 3. Precise model construction by proper measures 4. Be familiar with editing order and editing control point 5. Proper use of analytical model tool and input and output of different types of files of model 6. Precise presentation of shadow and materials					
教育目標 Education Objectives					
1	Cultivation of professional capability of products and media				
2	Cultivation of design capability of cultural and creative industry				
3	Cultivation of professional ethics and social concern				
4	Aesthetic practice in life, live and career education				
核心能力（專業能力） Learning Outcomes (Basic Learning Outcomes)				課程目標與基本素養 與核心能力相關性 Correlation between Course Objectives and learning Outcomes	
A	Professional knowledge			★	
B	Design Technology			★	

C	Humanities	◎
D	Creative Thinking	★
E	Information Technology	★
F	Communication and expression	★

圖示說明：Illustration：★高度相關 Highly correlated ◎中度相關 Moderately correlated

課程綱要

Course Outline

週次	課程內容： (含每週授課主題及進度)	備註
一	Introduction of instructional goals and course content	
二	Operational interface of computer-assisted design software	Function table, tool bar, drawing zone, order zone, horizontal moving and zoom
三	Business environment set and tool bar	Item setting and arrangement of tool bar
四	Build the geometry	2D objects, 3D objects
五	Create 2D objects (一)	Straight lines and free modeling curve
六	Create 2D objects (二)	Model construction assistance, layer and editing items
七	2D objects drawn practice	Hand drawing of activity board
八	3D modeling and editing (一)	Moldable items
九	3D modeling and editing (二)	Solid Modeling
十	3D modeling and editing (三)	Construction of curve
十一	3D modeling and editing (四)	Input and output model
十二	3D objects drawn practice	3D model drawing by mouse
十三	Rendering	Use of color, lighting, shadow rendering model, anti-aliasing, line setting and embossing image posting
十四	Plug-in rendering tool	Use of plug-in render program
十五	Dimensioning	Remark form of scales; 2D image constructed by 3D model
十六	Comprehensive Exercises (一)	3D model construction and render of printer
十七	Comprehensive Exercises (二)	3D render and 2D construction diagram output of printer
十八	Final Publication	

資源需求評估 (師資專長之聘任、儀器設備配合...等)

Resources Required (e.g. qualifications and expertise, instrument and equipment, etc.)

- Teachers must have experience of computer-assisted design

- Teachers must have good communication and negotiation capability
- Teachers must have Level-1 and Level-2 educational training experience
- Equipment of computer classrooms is required. Computers must have at least 1G of independent video card and 4G of memory

課程要求及教學方式之建議

Course Requirements and Suggested Teaching Methods

- Theory illustrate and explain.
- Actual use of computers
- In order to cultivate students' professional design literacy and sense of responsibility, students should submit the assignments before the deadline. The delayed submission is allowed within one week for the concern of emergency and sickness. Grades of the assignments will be 20% off. Without the submission of the assignments with proper reasons, the students will receive the grades as 0.
- Regular calls in classes; regarding students who cut classes without specific reasons for at least four times, the examination will be failed according to rules of schools.

其他

Miscellaneous