國立屏東大學 111學年度第2學期 教學課程綱要

※為保護智慧財產權,請勿非法影印教科書。

班別:視覺藝術學系一年甲班(CY110) 課程學分數:3.00(3.00小時)

授課老師:李學然(E54684)

必選修:必

開課序號	1768
科目名稱	3D繪圖導論(ART2072)
科目英文名稱	Introduction to 3D Graphics
授課語言	英語/全外語授課
主要教學型態	課堂教學
教學目標	The content of this course introduces the operating principles of 3D computer graphics software, including how to control the three-dimensional modeling with vertices, edges, surfaces, and sub-surfaces, the attributes and characteristics of the models, the use of various deformation tools, the various methods of texture mapping, and the classification and attributes of lighting, the method of creating shadows, the attributes of the camera, the interface of programming grammar, the characteristics and usage modes of animation skeletons, the setting interface of 3D animation, the concept of particle effects, the setting interface of 3D graphics, the methods of 3D project management, and so on.
每週課程內容 及教學方法	<pre>1 Course Introduction 2 Interface of software 3 Animation settings and color settings 4 Basic particle effects and Render setting 5 Outliner for object management 6 School Celebration Holiday 7 NURBS modeling foundation 8 Simple geometric models 9 Making a Head Model 10 Techniques on Texture Mapping 11 Arnold Texture and Rendering 12 Polygon modeling foundation 13 Skeleton Setting and Character Animation 14 Lighting settings 15 Camera settings 16 Discussion of Final project 17 Final evaluation of works (On Line) 18 Particle effects research (On Line)</pre>
核心能力	
預期學習成果	Students are required to use a computer as a three-dimensional studio to create a virtual drama model, set up a camera and lighting, set characters, motion, and camera movements, and finally output the finished 3D drawing with computer graphics. $\overline{\pi}: 1/2$

	Participation 20% Biweekly Assignments 60% Final works 20%
主要讀本	Handouts edited by the Instructor
參考書目	Alias Systems Corp. (2017) Learning Maya 2017, Foundation, Alias Systems Corp. Guindon, MA. (2007). Learning Autodesk® Maya® 2008 : the special effects handbook. Autodesk, Inc. Kundert-Gibbs, J. L., & Lee, Peter. (2001). Mastering Maya 3. Sybex.
其他事項	