

國立屏東大學 110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	1128																																																						
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	<table border="0"> <tr><td>1</td><td>0225</td><td>Course Introduction</td></tr> <tr><td>2</td><td>0304</td><td>Interface of software</td></tr> <tr><td>3</td><td>0311</td><td>Animation settings and color settings</td></tr> <tr><td>4</td><td>0318</td><td>Basic particle effects and Render setting</td></tr> <tr><td>5</td><td>0325</td><td>Outliner for object management</td></tr> <tr><td>6</td><td>0401</td><td>School Celebration Holiday</td></tr> <tr><td>7</td><td>0408</td><td>NURBS modeling foundation</td></tr> <tr><td>8</td><td>0415</td><td>Simple geometric models</td></tr> <tr><td>9</td><td>0422</td><td>Making a Head Model</td></tr> <tr><td>10</td><td>0429</td><td>Techniques on Texture Mapping</td></tr> <tr><td>11</td><td>0506</td><td>Polygon modeling foundation</td></tr> <tr><td>12</td><td>0513</td><td>Skeleton Setting and Character Animation</td></tr> <tr><td>13</td><td>0520</td><td>Lighting settings</td></tr> <tr><td>14</td><td>0527</td><td>Camera settings</td></tr> <tr><td>15</td><td>0603</td><td>Dragon Boat Festival</td></tr> <tr><td>16</td><td>0610</td><td>Arnold Texture and Rendering</td></tr> <tr><td>17</td><td>0617</td><td>Final evaluation of works (On Line)</td></tr> <tr><td>18</td><td>0624</td><td>Particle effects research (On Line)</td></tr> </table>	1	0225	Course Introduction	2	0304	Interface of software	3	0311	Animation settings and color settings	4	0318	Basic particle effects and Render setting	5	0325	Outliner for object management	6	0401	School Celebration Holiday	7	0408	NURBS modeling foundation	8	0415	Simple geometric models	9	0422	Making a Head Model	10	0429	Techniques on Texture Mapping	11	0506	Polygon modeling foundation	12	0513	Skeleton Setting and Character Animation	13	0520	Lighting settings	14	0527	Camera settings	15	0603	Dragon Boat Festival	16	0610	Arnold Texture and Rendering	17	0617	Final evaluation of works (On Line)	18	0624	Particle effects research (On Line)
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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.																																																						

與預期學習成果 搭配的多元評量	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, M.-A. (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	