UNIVERSITI TEKNOLOGI MARA

FFA232: FUNDAMENTALS OF 3D ANIMATION

Course Name (English)	FUNDAMENTALS OF 3D ANIMATION `APPROVED`
Course Code	FFA232

MQF Credit	3

Course Description	This course introduces students to the concept of 3D computer animation. Through practice and analysis, students will be learning from the fundamental of 3D form creations to scene compositions with 3D objects, texturing lighting, camera work and rendering. The students will be able to understand primitives' structural creation of objects and texturing to create a 3D forms and scene.

Transferable Skills	Identify primitives' structural creation of objects and texturing to create 3D forms and scene.
	Intergrating the fundamental of 3D form creations to scene compositions with 3D objects, texturing lighting, camera work and rendering.
	Develop a physical 3D form and manipulating 3D objects in virtual space with proper production workflow related to the stages in the 3D scene creation.

Teaching Methodologies	Lectures, Practical Classes, Tutorial

CLO	CLO1 Identify the relationship between 3D world and the real world
	CLO2 Comply a physical, dimension and proportion of 3D form
	CLO3 Demonstrate and manipulate 3D objects using various tools, techniques and processes

Pre-Requisite Courses	No course recommendations

Topics
1. Course Briefing & Introduction 1.1) n/a
2. The Tools for Modeling 2.1) n/a
3. Using Paths to create surfaces 3.1) n/a
4. Polygonal modeling 4.1) n/a
5. Compound Objects 1 5.1) n/a
6. Compound Objects 2 6.1) n/a
7. Basic Texturing 1 7.1) n/a
8. Basic Texturing 2 8.1) n/a
9. Basic Lighting & rendering 9.1) n/a
10. Create 3D scene 1 10.1) n/a

11. Create 3D scene 2 11.1) n/a
12. Create 3D scene 3 12.1) n/a
13. Animation Basics 13.1) n/a
14. Final Portfolio Presentation & Assessment 14.1) n/a

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Modeling 3D Object & Texturing	30%	CLO1
	Assignment	Complete 3D Lighting & Rendering	30%	CLO2
	Presentation	Create 3D set scene with a concept	40%	CLO3

Reading List	Recommended Text	• 1. O'Rourke, M. 1998, *Principles of Three-dimensional Computer Animation: Modeling, Rendering, and Animating with 3D Computer Graphics*, Norton NY
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	