



UNIVERSITI TEKNOLOGI MARA

CGD523: THREE DIMENSIONAL ANIMATION AND MODELING

Course Name (English)	THREE DIMENSIONAL ANIMATION AND MODELING APPROVED
Course Code	CGD523
MQF Credit	3
Course Description	This course provides an introduction to 3D modelling and animation process: organization and integration of various creative arts used in animation; possibilities in style, media, technique, and equipment.
Transferable Skills	Communication Teamwork Technology literacy Adaptability
Teaching Methodologies	Lectures, Studio, Tutorial, Simulation Activity, Computer Aided Learning, Project-based Learning
CLO	CLO1 Recognize the concept and theory of modelling and animation. CLO2 Construct creative arts, modelling and animation based on their learnt skills. CLO3 Integrate the art materials into an animation for team based project
Pre-Requisite Courses	No course recommendations
Topics	
1. Introduction, History & Current Industry of Games Art. 1.1) N/A	
2. 3D Software & Overview of Games Art 2.1) N/A	
3. 3D Graphics and Software Usage 3.1) N/A	
4. Modeling Principals: 3D Content Creation 4.1) N/A	
5. Vector Graphics, Polygons & Shaders 5.1) N/A	
6. 3D Modeling Optimization 6.1) N/A	
7. 3D Video Game Engines Introduction 7.1) N/A	
8. Texturing & Mapping Process on 3D Models 8.1) N/A	
9. Material Creation 9.1) N/A	
10. UVW Mapping 10.1) N/A	
11. Final Presentation 11.1) N/A	

Assessment Breakdown		%		
Continuous Assessment		100.00%		
Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	n/a	30%	CLO1
	Assignment	n/a	40%	CLO3
	Group Project	n/a	30%	CLO2
Reading List	Recommended Text	<ul style="list-style-type: none"> • Ami Chopine 2011, <i>3D Art Essentials: The Fundamentals of 3D Modeling, Texturing, and Animation.</i>, Focal Press [ISBN: 0240814711] • Michael E. Mortenson 2010, <i>3D Modeling, Animation, and Rendering: An Illustrated Lexicon</i>, CreateSpace [ISBN: 1453728481] • Chris Totten 2012, <i>Game Character Creation with Blender and Unity</i>, illustrated Ed., John Wiley & Sons [ISBN: 978-111823771] • Joseph J. LaViola Jr., Ernst Kruijff, Ryan P. McMahan, Doug Bowman, Ivan P. Poupyrev 2017, <i>3D User Interfaces: Theory and Practice</i>, 2 Ed., Addison-Wesley Professional [ISBN: 978-013403446] • Richard Lowe, Rolf Ploetzner 2017, <i>Learning from Dynamic Visualization: Innovations in Research and Application</i>, Springer [ISBN: 978-331956204] 		
Article/Paper List	This Course does not have any article/paper resources			
Other References	This Course does not have any other resources			