



UNIVERSITI TEKNOLOGI MARA

CTA634: ADVANCED 3D COMPUTER ANIMATION

Course Name (English)	ADVANCED 3D COMPUTER ANIMATION APPROVED
Course Code	CTA634
MQF Credit	3
Course Description	This course is an extension course of Computer Animation: Intermediate course which emphasizes on applying details into 3D character animation. Students will learn to integrate the 12 principles of animation into animated character and learn the technical features of 3D animation software technique and tools upon producing a vibrant and unique perspective of animated character project.
Transferable Skills	1. Demonstrate analytical skills using technology. 2. Demonstrate ability to apply creative, imaginative and innovative thinking and ideas to problem solving.
Teaching Methodologies	Lectures, Lab Work, Practical Classes
CLO	CLO1 Explain the 12 principles of animation and bridging the concept into 3D character animation CLO2 Compose keyframing of character's poses in pose to pose animation CLO3 Adapt to an expressive animated work by understanding in depth knowledge of the 12 principles of animation using the 3D software tools
Pre-Requisite Courses	No course recommendations
Topics	
1. Introduction to Character Animation Production Process 1.1) 3D Animation software tools	
2. Bouncing Ball 2.1) Normal weight	
3. Bouncing Ball 3.1) Light	
4. Bouncing Ball 4.1) Heavy	
5. Ball with tail 5.1) Animating the ball attitude	
6. Ball with tail 6.1) Animating the tail	
7. Ball with tail 7.1) Review and Mentoring	
8. Walk Cycle 8.1) Animating Leg and Hip	
9. Walk Cycle 9.1) Animating Pelvis and Spine	
10. Walk Cycle 10.1) Animating Arm swing and head	
11. Jump 11.1) Blocking	

12. Jump 12.1) Polishing
13. Jump 13.1) Submission of Final Project
14. Creating demoreel 14.1) n/a

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Assignment 1	30%	CLO1
	Assignment	Assignment 2	30%	CLO2
	Final Project	Final Project	40%	CLO3

Reading List	Recommended Text	<ul style="list-style-type: none"> • Richard Williams 2012, <i>The Animator's Survival Kit</i>, Revised Edition Ed. • Eric Goldberg 2008, <i>Character Animation Crash Course!</i>
	Reference Book Resources	<ul style="list-style-type: none"> • Ollie Johnson and Frank Thomas 1995, <i>The Illusion of Life: Disney Animation</i> • Preston Blair 1994, <i>Cartoon Animation</i> • John Halas 2009, <i>Timing for Animation</i>, 2nd Edition Ed. • Steve Roberts 2011, <i>Character Animation Fundamentals: Developing Skills for 2d and 3D character Animation</i> • Chris Webster 2012, <i>Action Analysis for Animators</i> • Francis Glebas 2012, <i>The Animator's Eye</i>
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	