



FAKULTI TEKNOLOGI DAN KEJURUTERAAN

PROGRAM	DIPLOMA IN GRAPHIC DESIGN
COURSE NAME	3D & ANIMATION
COURSE CODE	DGP 2053
CREDIT HOUR	3
SYNOPSIS	This course deals with the basics of 3D animation starting with basic key frame animation and reaching the depths of expression based automation and the principles of character animation. We will be also dealing with the theory that goes along with digital animation, such as dealing with animation curves and nonlinear animation techniques. The course will focus on Maya 2010 but similar rules and concepts can be applied to any other 3D Software.
COURSE STRUCTURE	
CHAPTER	TOPICS
1	MODULE 1: Introduction to 3D Animation 1.1 World of Animation 1.2 Definition Of Animation 1.3 Types of Animation
2	MODULE 2: Foundation of Animation 2.1 History of Animation 1.1.1 Zeotrope 1.1.2 Thaumatrope 2.2 Cel & Paper Animation Techniques 2.3 Synched Sound 2.4 Principles of Animation 2.5 basic principles in Animation
3	MODULE 3: Animation Techniques 3.1 Hand drawn animation 3.2 Stop motion animation 3.3 Cut Out Animation
4	MODULE 3: Animation Techniques 3.4 Clay/Claymation Animation 3.5 Computer animation 3.6 Drawn on film 3.7 Sand Animation 3.8 Paint on glass animation
5	MODULE 4: 3D Build-up 4.1 Introduction on 3ds Max 4.2 Creating 3D objects
6	MODULE 4: 3D Build-up 4.3 Advance 3D objects



7	MODULE 5: 3D Animation - Timing 5.1 Ball Bounce 5.2 Rising Door
8	MODULE 5: 3D Animation - Timing 5.3 Train 5.4 Wave 5.5 Walk Cycle
9	MODULE 5: 3D Animation - Texturing: 5.6 Assign Texture to 3d models 5.7 Exploring Textures Mapping
10	MODULE 5: 3D Animation – Key Framing: 5.8 Key framing techniques 5.9 Object selection and grouping
11	MODULE 5: 3D Animation - Rendering: 5.10 Color Assign 5.11 Uv-Map Settings and collaboration 5.12 Batch Render
12	MODULE 5: 3D Animation - Compositing: 5.13 F-check sequencing 5.14 Sequence software 5.15 Basic compositing techniques & software
13	MODULE 5: 3D Animation – Camera Shot: 5.16 Types of camera shot & angle
14	Importing and Exporting files
References:	1. Sharkawi Che Din. (2017). Animasi 3D Lanjutan. Kuala Lumpur: Dewan Bahasa dan Pustaka. 2. Jon Troy Nickel & Jacque Choi. (2010). The Swordmaster In 3Ds Max And Zbrush. United Kingdom: 3DTotal Publishing. 3. Gerhard, Mark & Harper & Harper, Jeffrey M. (2010). Mastering Autodesk 3ds Max Design 2011. Indiana: Wiley Publishing, Inc. 4. Richard Williams & Imogen Sutton. (2009). The Animator's Survival Kit: A Manual Of Methods, Principles And Formulas. London: Faber and Faber Limited. 5. Amierul Allif. (2009). Animasi Kartun dengan Flash 8. Kuala Lumpur: Synergy Media.

