



UNIVERSITI TEKNOLOGI MARA

EAD415: VISUALIZATION TECHNIQUES

Course Name (English)	VISUALIZATION TECHNIQUES APPROVED
Course Code	EAD415
MQF Credit	2
Course Description	This course require analytical and conceptual visualization skills in order to transform abstract thought efficiently into graphic, tangible forms and to manage the topic complexity and the problems addressed in each class. The key for visualization techniques and methods are to provide visualization principles and exercises for students' experiences.
Transferable Skills	1) Demonstrate ability to identify and articulate self skills, knowledge and understanding confidently and in a variety of contexts. 2) Demonstrate ability to apply creative, imaginative and innovative thinking and ideas to problem solving.
Teaching Methodologies	Lectures, Studio, Demonstrations, Tutorial, Discussion, Presentation
CLO	CLO1 Introduce the basic understanding of visualization principles and its methods. CLO2 Visualize through such techniques as thumbnails, rhythmic and spatial rendering. CLO3 Explains units include grids, one and two points perspectives shading color, shadows, reflections, rapid indication, the visualization process, graphic expression and graphic creation. CLO4 Equip the student with the hand skills needed to quickly and accurately visualize and communicate on paper a wide variety subject matter in a believable way.
Pre-Requisite Courses	No course recommendations
Topics	
1. Introduction to Visualization Techniques 1.1) Why, where and how visualization matters 1.2) Job area for a visualizer	
2. Basic Principles of Visualization Techniques 2.1) Fundamentals of perception and visualization. 2.2) Theories of perception and attention, guidelines based on gestalt and attention principles.	
3. Visual approaches activated different ways of working. 3.1) Working visually. 3.2) Visual ideas. 3.3) Pictures communicating. 3.4) Images contribution.	
4. Tools and techniques of visualization 4.1) Surfaces 4.2) Mark-makers 4.3) Words 4.4) Lines 4.5) Pictures 4.6) Sizes	

5. Gestalt Theory 5.1) Visual perception and psychology among graphic arts 5.2) Emergence 5.3) Reification 5.4) Multistability 5.5) Invariance
6. Patterns and Theme of 'Theme Board' 6.1) Results of synthesis which act as a bridge to design process. 6.2) Concept Sketches
7. Visual Layouts 7.1) Mind Maps 7.2) Graphs 7.3) 2 x 2s 7.4) Mandalas 7.5) Grids
8. Preproduction visualization 8.1) Imagination to imagery 8.2) Visual awareness
9. Post-production Process 9.1) Storyboarding 9.2) Overhead diagrams
10. Visualization for presentation and problem solving 10.1) Communicate with images 10.2) Variety of ways on problem solving
11. Progressive Consultation on Final Project 11.1) Submit Progress Report & Artwork
12. Showcase & Critique Session 12.1) Final presentation

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Assignment	20%	CLO3
	Assignment	Assignment	30%	CLO2
	Final Project	Final Project	20%	CLO4
	Individual Project	Individual Project	30%	CLO1

Reading List	Reference Book Resources	<ul style="list-style-type: none"> • Begleiter, M 2010, <i>From word to image: storyboarding to film making process</i>, Michael Wiese Productions • Weise, M, Weynand, D 2007, <i>How Video Works</i>, Focal Press • Martinez, B., & Block, J. 1995, <i>Visual Forces</i>, Prentice Hall, Englewood Cliffs • Theoharis, T, Papaioannou, G, Platis, N, Patrikalakis, N.M. 2007, <i>Graphic and Visualization: Principles and Algorithms</i>, Wellesley, MA:AK Peters.
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	