



UNIVERSITI TEKNOLOGI MARA

CPM411: PHOTOGRAPHIC IMAGING THEORIES AND TECHNIQUES

Course Name (English)	PHOTOGRAPHIC IMAGING THEORIES AND TECHNIQUES APPROVED
Course Code	CPM411
MQF Credit	3
Course Description	The course objectives are to introduce the student to the technical aspects of photography. Students will be expected to demonstrate an ability to effectively use the Digital SLR camera, mainly emphasis on manual over-ride mode, with the introduction to entry-level professional digital photography and to understand the theories of quality imaging through photography. Designing the projects or exercises, in which, allows the students a practical in problem solving, with the intention of generating plausible dynamic composition possible. Students are encouraged to be creative in the usage of art & graphic fundamentals into their composition. The students will have a comprehensive knowledge in the usage of the camera throughout from pre-visualization towards the understanding of the digital workflow
Transferable Skills	Demonstrate ability to communicate clearly and confidently, and listen critically
Teaching Methodologies	Lectures, Demonstrations, Field Trip, Practical Classes, Tutorial
CLO	CLO1 Develop critical evaluation by-selection of composition within the rectilinear frame-of-reference CLO2 Build up their confidence in photography with professional means by the end of the study CLO3 Apply the fundamentals of photography studies; assigning the basic usage of the tool to produce better images
Pre-Requisite Courses	No course recommendations
Topics	
1. Introduction Photography 1.1) Definition of Photography 1.2) Pinhole Camera Image formation 1.3) Basic Light Theories (Electromagnetic Waves) 1.4) Light Sensitive Medium (Film & Sensor as a Recording Medium) 1.5) Short History of Photography	
2. Type & Format of Conventional Camera 2.1) Camera Anatomy 2.2) Big Format 2.3) Medium Format 2.4) Small Format	
3. Digital Camera System & Camera Anatomy 3.1) Camera Anatomy	
4. Exposure 4.1) Concept of Under, Over & Normal Exposure 4.2) Aperture & Shutter 4.3) Image Sensor & Sensitivity (ISO) 4.4) Light Meter (Built in Meter, External Light Meter) 4.5) In Camera Metering Mode (Spot, average, Centre)	

5. Digital Imaging System 5.1) Type of Memory Card 5.2) Type of Sensor (CCD & CMOS) 5.3) Image & Pixels 5.4) File System (JPEG, TIFF & RAW) 5.5) Image Size and Resolution
6. Lenses System 6.1) Basic Optical System (Compound Lens & Optical) 6.2) Focal Length (Angle of View, Coverage & Sensor, Crop) 6.3) Type of Lens 6.4) Focusing System (Manual & Autofocus)
7. Composition and Lighting Study 7.1) Basic Element 7.2) Framing and Section 7.3) Rule of Third 7.4) Natural Light 7.5) Mix Light 7.6) Night Photography
8. Presentation 8.1) Minor Project
9. Shooting Techniques-Mode, Depth of Field 9.1) Hand held Camera Handling 9.2) Camera Support (Tripod, Monopod) 9.3) Shooting Mode (Manual, Auto, Program) 9.4) Depth Of Field Control
10. Shooting Techniques-Shutter Speed, Creative Shooting 10.1) Movement Object Control (Slow to Fast Shutter speed) 10.2) Creative Shooting Techniques (Panning, Zoom In & etc) 10.3) Long Exposure Technique (Bulb & Night Photography) 10.4) Close Up Photography
11. Built In Flash 11.1) Manual, Auto & Built In Flash
12. Colour System 12.1) Digital Colour Profile (RGB Filter) 12.2) White Balance (Colour Temperature of Difference Light) 12.3) Filter (Polarizing, Colour Correction)
13. Camera and Lens Maintenance 13.1) n/a
14. Presentation 14.1) Major Project

Assessment Breakdown	%
Continuous Assessment	40.00%
Final Assessment	60.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Students need to take a picture using various exposure. i. Under, Over & Normal Exposure ii. Shutter – Slow, Medium, Fast iii. Long Exposure Students need to take a picture using various F-numbers to produce images of different depth of field. i. Big F-numbers ii. Medium F-numbers iii. Small F-numbers Students need to take a picture using various lenses to see the difference in distance and angle to produce good picture. i. Lenses 35mm ii. Lenses 50mm iii. Lenses 105mm Student need to take a photo portrait with three positions. i. Front ii. Side iii. Quarter front	40%	CLO1

Reading List	Reference Book Resources	<ul style="list-style-type: none"> • Langford, Micheal 2005, <i>A guide to better pictures for film and digital camera users</i>, Fourth Edition Ed. • Barrett, Terry 1999, <i>Criticizing Photographs: An Introduction to Understanding Images</i>, McGraw-Hill • Schaefer, John Paul 1999, <i>Ansel Adams Guide: Basic Techniques of Photography</i>, Vol. 1 Ed., Bulfinch Publication • Naegele, D. (ed.) 1998, <i>Photography and Architecture', History of Photography</i> • Rosenblum, Naomi 1997, <i>A World History of Photography</i>, Abbeville Press, Inc.
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	