



UNIVERSITI TEKNOLOGI MARA

CPM401: DIGITAL PHOTOGRAPHY THEORIES AND TECHNIQUES

Course Name (English)	DIGITAL PHOTOGRAPHY THEORIES AND TECHNIQUES APPROVED
Course Code	CPM401
MQF Credit	4
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	communication skill, knowledge, digital imaging skill
Teaching Methodologies	Lectures, Demonstrations, Field Trip, Tutorial, Discussion, Presentation
CLO	CLO1 Explain the importance of Digital Photography Theories and Techniques towards the current trends and practices CLO2 Display proper skills and techniques in Photographic Imaging field CLO3 Demonstrate written and verbal communication skill in Digital Photography Theories & Techniques.
Pre-Requisite Courses	No course recommendations
Topics	
<p>1. Student has to produce design proposal and to fabricate accordingly to the function and specification below:</p> <p>1.1) Topic 1: Introduction a. Definition of Photography b. Pinhole Camera Image formation c. Basic Light Theories (Electromagnetic Waves) d. Light Sensitive Medium (Film & Sensor as a Recording Medium) e. Short History of Photography</p> <p>1.2)</p> <p>1.3) Topic 2: - Type and Format of Conventional Camera - Digital Camera System -Camera Anatomy</p> <p>1.4)</p> <p>1.5) Topic 3: Exposure a. Concept of Under, Over & Normal Exposure b. Aperture & Shutter c. Image Sensor & Sensitivity (ISO) d. Light Meter (Built in Meter, External Light Meter) e. In Camera Metering Mode (Spot, average, Center)</p> <p>1.6)</p> <p>1.7) Topic 4: Digital Imaging System a. Type of Memory Card b. Type of Sensor (CCD & CMOS) c. Image & Pixels d. File System (JPEG, TIFF & RAW) e. Image Size and Resolution</p> <p>1.8)</p> <p>1.9) Topic 5: Lens System a. Basic Optical System (Compound Lens & Optical b. Focal Length (Angle of View, Coverage & Sensor, Crop c. Type of Lens d. Focusing System (Manual & Auto focus)</p> <p>1.10)</p> <p>1.11) Topic 6: Composition and Lighting Study a. Basic Element b. Framing and Golden Section c. Rule of Third d. Natural Light e. Mix Light f. Night Photography</p> <p>1.12)</p> <p>1.13) Topic 7: Shooting Techniques a. Hand held Camera Handling b. Camera Support (Tripod, Monopod) c. Shooting Mode (Manual, Auto, Program) d. Depth of Field Control</p> <p>1.14)</p> <p>1.15) Topic 8: Shooting Techniques Cont. e. Movement Object Control (Slow to Fast Shutter speed) f. Creative Shooting Techniques (Panning, Zoom In & etc) g. Long Exposure Technique (Bulb & Night Photography) h. Close Up Photography</p> <p>1.16)</p>	

1.17) Topic 9: Micro Built in Flash & On Camera Flash Technique a. Manual, Auto & Built in Flash
1.18)
1.19) Topic 10: Colour System a. Digital Colour Profile (RGB Filter) b. White Balance (Colour Temperature of Difference Light c. Filter (Polarizing, Colour Correction)
1.20)
1.21) Topic 11: Camera and Lens Maintenance

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Clearly and fluently presenting the project related to 'oral communication' and 'writing communication' in MQF 5 LOD	20%	CLO3
	Assignment	Two times tests related to the theories & techniques of photographic imaging require student to gain knowledge to emphasize the attribute of 'knowledge' in MQF 1 LOD	40%	CLO1
	Assignment	Three Assignments to show digital imaging skills, related to MQF LOD2	40%	CLO2

Reading List	This Course does not have any book resources
Article/Paper List	This Course does not have any article/paper resources
Other References	This Course does not have any other resources