

SYLLABUS

SEMESTER-1

BASIC-2

DIGITAL PHOTOGRAPHY

Credits: 3

L	T	P
2	1	0

1. Digital Photography

Invention of Photography- Its purpose and potential- Digital construction of a photograph, Picture elements: Pixels and sub pixels - Advantage of digital images

2. Digital Camera

- a) **Camera Features:** Design - Manual and auto control mode - View finder- Optical and live view- Lenses-image capture - storing system, memory card - Playback - image editing, image orientation.
- b) **Camera controls:** Sharpness control –Subjective and selective focus – Exposure control – Shutter speed and Aperture – Depth of field – Correct exposure – Gray scale and mid gray – Built in exposure meter, overriding auto exposure, creative use- impression of movement; Exposure Value – White balance; Frame rate - Built in flash - Image quality and size – Compression
- c) **The lens for photography:** Features of camera lens - Types of lens - Focal length - Angle of view - Magnification - Digital zooming - Perspective and its control - Choosing appropriate lens for various kind of assignment
- d) **Image Sensor: CCD and CMOS sensors:** Image size: Number of Pixels, Mega pixels, size of display - Resolution - indicator of sharpness, image size - size of sensor - aspect ratio - size of final print, sensitivity and noise

3. Lighting for Photography

Quality of light - Direction of light; Brightness of light - Lighting contrast; Flash light – objective of flash light; Types of flash – Electronic flash, External flash unit. Inverse square law – Red eye

4. Theory of color reproduction

Color of light source - Photographing in various light source - Sunlight, moon light, night, Candle light and fire work - Color of the final picture / print - Color balance

5. Digital workflow

Capturing – Storing – organizing – editing – sharing - archiving and backing-up of photographs; Image formats: JPEG, RAW, DNG, TIFF, File compression; Camera image storage device – Storage Capacity: Flash memory cards: CF, SD, MMF cards, Memory stick and Hard drive - Downloading images

Reference Books:

1. Basic Photography-Using a Digital Camera by Jongpil Cheon
2. Digital Art Photography for Dummies: by Matthew Bamberg
3. The Textbook of Digital Photography: by Dennis P. Curtin (3rd edition)
4. Visual Storytelling by Morgan Sandler

DIGITAL PHOTOGRAPHY-PRACTICE

Credits: 3

L	T	P
0	0	6

1. Study of DSLR camera: Its anatomy & functions.
2. Picture making
 - Focusing, Framing, Correct exposure-Shutter and aperture priority
 - comparing photographs of a given subject from different viewpoints and determine the best
 - Capturing motion in still camera
 - Creating meaning of a photograph or photographing a given phrase