

SYLLABUS

6th SEMESTER

CINEMATOGRAPHY

SP. PAPER-4

LIGHTING FOR FILM & TV

Credits: 3

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3	0	10

1. Introduction

- 1.1 Behavior of light: Various source and their shadows; Point and broad source, Reflection of light from the subject, direct reflection, diffuse reflection, and polarized direct reflection; Placement of light on the subject in relation to camera position
- 1.2 Image on digital Camera: Computer is the heart of digital camera, Manual vs. Auto mode, JPEG and Raw format
- 1.2 Lighting Equipment: Requirement for small area vs. large area, Creative lighting: the result of planning the lighting, more than the equipment, it is the photographer who makes the picture?

2. Light and Lighting

- 2.1 Definition of light in applied photography, Photons and its energy, the electromagnetic radiation, no mass, invisible, Frequency of light waves, Hertz and Megahertz
- 2.2 Photographer's concern: Brightness, Color and Contrast; a) Brightness and Exposure, Minimum brightness, b) Color response through human eye and brain, Concept of color temperature, Behavior of digital camera towards color, c) Contrast of light sources, size of the light source affects contrast, Subject matter and exposure can control contrast
- 2.3 Lighting makes the subject three dimensional, Interpreting visual clues, a) Depth clues, Perspective distortion, b) Lighting clues, Tonal variation; Interpretation of the clues by human brain

3. Light source

- 3.1 Size of the source and distance of the source from the subject, Effective size of the source, Diffusion screens, umbrella, soft boxes and bounce boards, Clouds of an overcast day as excellent diffusion material
- 3.2 Distance from the subject: Closer the light source from the subject softer are the shadows, farther the source harder is the shadows, Large light units create soft shadows and small units hard shadows

- 3.3 Direction of light: Front, Back and side light; Perception of depth requires both high lights and shadows, No tonal variation no depth, Fill light

4. Lighting for Digital Video

- 4.1 a) Should be enough for the CCD to produce an image, b) the contrast range needs to be compressed enough to provide some detail in dark areas but not overexpose high-lit areas
- 4.2 a) Film Lighting: Creating shadows and highlights to reveal depth, effect of light on shiny and matte surface b) TV studio lighting: Flat lighting / High-key lighting (Light on a subject is of equal intensity from all sides)
- 4.3 Basic lighting set-ups: Key light, Fill light, Back light and background light; Using distance to control the brightness of light, inverse square law, Other methods: using diffusion materials, Dimmers, or wire scrims, Expression of emotion through eye glint,

5. Film style Lighting

- 5.1 Creating a realistic simulation of the eye's experience of the world and creating mood, from mere illumination to an art form, lighting moving people
- 5.2 Realistic lighting: Layout plan; Action area, close-up and mood; Target exposure, Positioning the Key lights; Problem of shadows; Creating accent lighting and bringing the fill light; Adding shadows and controlling hot spots
- 5.3 Low budget lighting process and Principles in TV serials and film

Reference Books

1. Light Science and magic: By Fil Hunter, Steven Biver and Paul Fuqua (Focal Press) 5th Edition
2. Lighting for Digital Video and Television: By John Jackman (Focal Press) 3rd Edition
3. Lighting for Cinematography; By David landu
4. Motion Picture and Video Lighting: By Blain Brown (Focal Press) 2nd Edition
