SESSSTION-JULY 2018

**various Cinematography Tutorials** / Modules to be covered in the Cinematography Course Offered in OUR CRAFT FILM SCHOOL

**CINEMATOGRAPHY Tutorial 1–** Type of still cameras

• View Camera

• Viewfinder Camera

• Single Lens Reflex Camera

• Twin Lens Reflex Camera

**CINEMATOGRAPHY Tutorial 2** - Part of still SLR-CAMERA. / Digital SLR camera.

01. Viewfinder

02.Shutter Release

03.Shutter

04. Shutter Speed Control

05. Film Speed Control

06. F-Stop Control

07. Film Compartment

08. Flash

09. Hot Shoe Mount

10. Lens Ring Mount

**CINEMATOGRAPHY Tutorial 3: -. BASIC Photographic Image:**

1. Motion picture Photographic Emulation

2. Film base

3. Latent image: image formation

4. Grain, graininess. FILM SPEED

**CINEMATOGRAPHY Tutorial 4: - Exposure control.**

1. Exposure

2. Film speed. ASA

3. Shutter speed

4. Aperture

**CINEMATOGRAPHY Tutorial 5: composition rules**

1. Line
2. Shape
3. Color
4. Texture
5. Direction
6. Size

**CINEMATOGRAPHY Tutorial 7: Lens:**

1. Resolving power: definition Focal length

2. Prime lenses/block lenses

3. Zoom lens

4. Angle of view

5. Normal lens

6. Telephoto lens

7. Wide angle lens

8. Macro lens/micro lens

9. Converter

10. Idea of perspective

11. Zoom ratio

12. lens speed

13. Depth of field

14. Depth of focus

15. Hyper focal distance.

16. Lens.Companies.carlZeiess. Anguenus.

**CINEMATOGRAPHY Tutorial 8: - ADVANCE Photographic Image:**

1. Halation,

2 Anti halation backing,

3 Sensitometry.

4 logarithmic scale

5 Opacity

6. Density

7 Base densities,

8. Relation between Density and fog level

9 . Characteristic Curves

10. D-max D-min, Shoulder, Toe,

11. Gamma.

12. Density measurement

13. Black and white density

**CINEMATOGRAPHY Tutorial 9: - ADVANCE EXPOSURE CONTRAOL**

1. Exposure test

2. Metering

3 Exposure latitude

4 Light meters

5. Incident light meter

6. Reflected light meter

7. 18% grey card.

8. Zone System - Ansal Adam

**CINEMATOGRAPHY Tutorial 10:-** Color FILMS for still photography

1. Film speed

2. Contrast.

3. Color reproduction

4. Structure of the colour film

5. Color negative processing

6. Various types of still photography films

7. Negative processing.D-41.

8. Transparency and processing E-6

**Colour and contrast**

1. Primary colour

2. Secondary colour

3. Tints and shades

4. Colour mixing, subtractive and additive

5. Complementary colours

6. Basic properties of colour

7. Hue, value, saturation

8. Brightness and luminosity

9. Warm and cool colour

10. Colour relationship, harmonious, contrasting

11. Neutral colour

12. Colours and lights

13. Colour Psychology

**CINEMATOGRAPHY Tutorial 11: - Camera filters: for black and white / color Motion picture**

1. Filter factor

2. Filter grades

3. UV filter

4. Infra red filter

5. Neutral density filter

6. Colour gradation

7. Polarizing filter

8. Spl effect filters

9. Diffusion filters

10. Fog or pro-mist filter

11. Contrast control filter

12. Star effect

13. Filter for black and white

14. Colour converstion.80B, 85.

15. Y-1. Filter.

16. Sepia filter

*17. Day for night*

*18. Contrast viewing filter*

*19. Close up and split Field*

*20. Hand made filter*

*21. 85and ND mixed*

*22. Florescent correction filter*

*23. Mixed light situation*

**CINEMATOGRAPHY Tutorial 12: - VARIOUS TYPES OF lights.**

1. Tungstenlamps

2. quartz lamp

3. arc lamp

4. Fluorescent tube lights

5. Full spectrum fluorescent

6. Flicker free Lights, HMI

7. Muti-20, Muti-10, baby, solar, 5K

8. Mini Brute

9. Strobe lights

10. Kino-Flo spl lights

11. Fresnal spot

12. Follow spot

13. Disco -lights

14. Cyclorama/background lights

15. Soft Box lights.

16. Use of cutter stand, black cloth

17. Use of Skimmer and satin cloth

18. Various diffusion materials

19. Control of intensity

20. Barn doors

21. Use of reflectors

22. Outdoor location lighting

23. Studio lighting

24. Day for nights

25. Night exterior.

**CINEMATOGRAPHY Tutorial 13: Lighting tools to control the Light.**

1. Cutter stand

2. Black cloth

3. Black paper

4. Thermo coal

5. Gateway paper

6. Butter paper

7. Barn door

8. Skimmer

9. Magic arm

10. Tarrrapa cutter

11. C-clamp

12. U- Clamp.

***DIGITAL graphy Cinematography Tutorials:***

**Principle of Television**:

1. Interlace scanning

2. Horizontal scanning

3. Vertical scanning

4. Line interval

5. Horizontal sync

6. Vertical interval

7. Sync pulse generator

8. Vertical resolution

9. Horizontal resolution and band width

10. Colour composite DIGITAL signal

11. Colour Television systems (PAL,SECAM,NTSC)

12. Colour Principles.

13. Colour bars

14. Split Fields

15. How to adjust Colour Monitor

**DIGITAL camera:**

1. Pick up Device

2. Optical section

3. Charge Couple Device-CCD.

4. Interline transfer

5. Frame transfer

6. Comparison between it and ft sensor

7. Electronic Shutter

8. Handling highlight

9. HAD sensor

10. Advantages/ limitation / resolution of CCD

11. Corrections applied to DIGITAL processing

12. Shading Corrections

13. Aperture Correction

14. Flare Correction

15. ABL

16. Gamma correction

17. Chrome gamma/colour correction

18. Digital Signal processing in camera.

**DIGITAL camera ACCESSORIES**:

1. Zoom lens

2. View Finder

3. Microphone

4. Test chart

5. Battery

6. AC adapter

7. Camera cable

8. Care and handling of the

Equipment

**Functions and Controls of DIGITAL Camera.**

1. Colour Bar

2. Power on/off

3. VTR on/off

4. Zoom control

5. Iris Control auto/ manual/

6. Viewfinder

7. Earphone

8. CCU cable connector,

9. Camera Connector

10. DIGITAL out

11. Battery carrier

12. Mikes in

13. Low light On/off

14. Viewfinder Controls

15. Eye Piece Focus

16. Zebra on /off

17. Marker

18. Viewfinder indicators

19. CG

20. Black Level/white balance

21. Iris

22. Audio

23. Gain DB.

24. Filter selection

25. Colour Temperature

26. Tape end

27. Ape position

28. Black stretch

29. Shutter/various speed of electronic shutter.

30. Tone

31. Various Controls and how to use them

32. Lens controls

33. Back focus and how to set it

34. Macro Focus

35. Gen Lock,

36. Multi-core camera cable,

**Camera support for DIGITAL /film cameras:**

1. Tripod

2. Type Of heads

3. Trolley dolly and cranes

4. Large camera Cranes

5. Fixing camera to vehicle

6. Remotely controlled camera system

7. Hand held camera

8. Steady cam

9. Rigging material.

10. chiken box.

**Understanding DIGITAL recording**

1. Composite and component

2. Principle of DIGITAL recording

3. VTR formats

4. Digital Recording Formats

5. Ampex: - DCT

6. Chromo Sampling Methods

7. DIGITAL compression

8. JPEG

9. MPEG, MPEG-1, MPEG-2.

10. Editing and compression

11. Digital sampling and storage

12. ***DV formats from Panasonic*** *DVC-pro: DVC-pro.****25****:DVC - pro.* ***50:***

13. ***DV formats from Sony:***

***Recording Formats:***

*1. BETCAM –SX*

*2. DIGI- BETACAM*

*3. DV-CAM.*

*4. HD-CAM*

*5. HD*

*6. HD-V*

*7. XD-CAM/CINE ALTA*

*8. MPEG-IMAX*

**Feature comparison in various Popular camera Models of Sony/Panasonic**

**1. DSR-400.P**

**2. DSR-450.WSP.**

**3. DSR-250.P**

**4. DSR-PD.170.P**

**5. HDV-HVR-Z1.E.**

**6. HDV-HVR-A1.E.**

**7. PDW-530.P/510.P**

**8. VARIOUS STUDIOS –VTR.**

**9. DR.1000AP-HARD DISK RECORDER.**

**10. MSW-970.P. (MPEG…IMX.)**

*# OTHER CAMCORDER OF VARIOUS SHOOTING FORMATS of Sony*

*compatibility of Dvcam and Dvc pro format.*

**Muti-camera system and ONLINE prod.**

1. CCU

2. TIME BASE ERROR

3. Imp points about Muti camera system.

**DIGITAL Signal measurement tool**

1. Waveform monitor

2. Monitoring the DIGITAL signal

3. Controlling the camera signal

4. Stability of the DIGITAL signal

5. Vectroscope

6. Front panel control of Vectroscope

7. Phase and amplitude of colour vector

**“Time Code” in DIGITAL Recording.**

1. LTC

2. VITC

3. Various Imp points related to time Code.(trouble shooting scenario)

***Cinematography Cinematography Tutorials:***

**CINEMATOGRAPHY Tutorial 1:-Film Dimension and Packaging:**

1. Negative and positive perforation

2. Edge No

3. Cores and camera spool

4. Edge marking

5. 16mm film winding

6. a-winding and B-winding

7. CAN. Label information

**CINEMATOGRAPHY Tutorial 2: - Processing and printing.**

1. Various section of Motion picture lab

2. Colour negative and intermediate film [processing

3. Intermediate film

4. Positive film

5. Wash, Drying, Development

6. Colour film printing

7. Printer

8. Liquid gate printing

9. Photo-guarad

10. Step printer, optical printer

11. Printing colour Correction

12. Necessity of colour correction

13. Additive colour correction method

14. Scene to scene colour correction

15. Trimmer correction

16. Colour correction effect

17. Colour correction determination

18. Black and white film printing.

CINEMATOGRAPHY Tutorial 3: FILMS FOR MOTION PICTURES VARIOUS TYPES OF FILM.

**FILM SCREENING OF FILMS:*Study of various Films and Commercial from cinematographic point of View.***

**1. Red Desert.Dir By antonionoi**

**2. Sacrifice: dop: Sven Nykvist**

**3. Cries &Wisper.SvenNykvist**

**4. Payasa : V.K Murty.**

**5. Sahib bibiaurGulam:V.k.Murty**

**6. Vittorio Sorraro:shootingglass:reflection: Carlo Saura’ Flamneco.**

**7. films.children of a lesser God.**

**8. stuyding the Conceptual lighting.Godfather-3,**

**9. Music DIGITAL**

**CINEMATOGRAPHY Tutorial 4:-Part of the Motion picture cameras:**

1. Various parts of Motion picture cameras

2. perforation loop

3. Pressure plate

4. Plate catch

5. Pull down claw

6. Magazine

7. Threading of film

8. Loading unloading of magazine

9. Types of magazine

10. Intermittent Movement

11. Analysis of Claw motion

12. Registration pin

13. Sprocket wheel

14. Frames per sec

15. View finder.

16. Eye piece adjustment

17. Camera Motors

18. Slow motion and Fast motion

19. Reverse Movement

20. Tacho meter

21. Lens Mount Flange Depth

22. Matte Box

23. Blimp

24. Changing bag

25. Magazine Cover/rain cover.

**CINEMATOGRAPHY Tutorial 5: Transfer of Film to DIGITAL .**

1. Tele-cine basic. **-Edge no and Time code.**

2. Type of Tele-cine machine.

3. Frame per sec.

4. File type.

LATEST TECHNOLOGY:

Digital Intermediate:

Understanding various models and technical aspects connected with D.I.

**CINEMATOGRAPHY Tutorial 6:Various Camera Test:**

1. Physical condition of the camera and lenses

2. Optical path and focusing

3. Shutter

4. Gate

5. Camera Choking

6. Motors

7. Scratches

8. Fogging of film

9. Taking care of your camera

10. Sample lens test

11. Eye piece /viewfinder/ground glass

**CINEMATOGRAPHY Tutorial 7: Batteries for Motion picture camera**

**CINEMATOGRAPHY Tutorial 8: Shooting Format:-**

16mm/

35mm/

70mm/

super.16/

I-max

/3-D

**CINEMATOGRAPHY Tutorial 9: Types of film Cameras: Histrocal perspective**

1. AATON.35-III,

2. Aspect ratio,

3. ARRICAM,

4. DIGITAL assist,

5. ARRI-535.B.

6. ARRI-435

7. ARR-BL.

8. ARRI-3

9. ARRI-2C

10. 16.SR-II

11. 16.SR-3.

12. PANAVISION

**CINEMATOGRAPHY Tutorial 10: steps in film making till married print Cinema Projection:**

1. Print Color balance

2. Screen luminance

3. print loading and rewind

4. random points about projection

5. Electronic Display Devices.

**# FILM- STORAGE**

Silica gel.

**CINEMATOGRAPHY Tutorial 11: Digital film making**

# LFR( Laser film recorder) and

DI.(DIGITAL INTERMEDIATE)

various latest Film camera: their compaction study about various Features

1. RED ONE
2. SCARLET M-X
3. EPIC M-X 5K
4. EPIC DRAGON

2.1 Alexa

2.2 Alexa Plus

2.3 Alexa Plus 4:3

2.4 Alexa M

2.5 Alexa Studio

2.6 Alexa XT

2.7 Alexa 65

2.8 Alexa Mini

2.9 Alexa SXT

2.10 Alexa LF

|BLACK MAGIC|

SONY - F-65

SONY - F-55

SONY - F-5

SONY - VENICE