SHORT TERM VOCATIONAL CERTIFICATE COURSE

CINEMATOGRAPHY

(06 months Duration)

Prepared by

RAVIBABU NANNAM

M.F.A., PGDCS., PGDTVP Asst. Prof. Dept. of Photography & Visual Communication JNAFAU College of Fine Arts Hyderabad

Dr. AUKNOOR GOUTAM

Ph. D in Digital Film Technology, Hyderabad

&

MADHU MAHANKALI

Academic Consultant / Teaching Faculty of Cinematography Dadasaheb Phalke School of Film Studies, Hyderabad

Course Coordinator: Dr. R. JYOTHSNA RANI Principal & Lecturer SIVE, O/o Director of Intermediate Education, Hyderabad

STATE INSTITUTE OF VOCATIONAL EDUCATION Director of Intermediate Education, Hyderabad HYDERABAD, TELANGANA

SHORT-TERM VOCATIONAL - CERTIFICATE COURSE CINEMATOGRAPHY

NAME: Cinematography SECTOR: Media Services CODE: CG ENTRY QUALIFICATION: Minimum 10th Std. PRE-REQUISITES: Basic Knowledge of Videography & Video-Editing

Terminal competence:

Completing Cinematography course opens up various career paths and opportunities for students, including roles such as Director of Photography (DP), Camera Operator, Cinematographer for television and streaming platforms, Documentary Filmmaker, Commercial and Advertisement Cinematographer, Independent Filmmaker and Educator or Workshop Instructor.

Duration: 06 Months (240 Hours)

Introduction:

Cinematography is the art and technique of capturing moving images on film or digital media. It involves the careful orchestration of camera angles, lighting, composition and movement to convey a story visually. Cinematographers play a pivotal role in shaping the visual language of films, infusing them with emotion, atmosphere, and storytelling nuance. Through their creative lens, cinematography transforms scripts into captivating visual experiences.

Objectives:

- Visual Storytelling
- Aesthetic Composition
- Technical Proficiency
- Collaboration with the Film Crew
- Adaptation to Narrative Needs

Skills:

Technical Proficiency: Cinematographers must have a strong foundation in the technical aspects of filmmaking, including operating cameras, choosing appropriate lenses, understanding lighting setups and utilizing various equipment. A solid grasp

of the tools of the trade is essential for capturing high-quality footage.

Creativity and Artistic Vision: A keen sense of creativity and a strong artistic vision are crucial for cinematographers. They must be able to translate the director's vision into visually compelling images, making creative decisions about framing, composition and visual style to enhance the storytelling.

Attention to Detail: Cinematographers need a meticulous eye for detail, ensuring consistency in framing and lighting throughout a scene or film. Small details can significantly impact the overall visual coherence, and a cinematographer's attention to these details contributes to the quality of the final product.

Communication and Collaboration: Effective communication and collaboration skills are essential for working with directors, producers and other crew members. Cinematographers need to articulate their ideas, understand the director's vision and collaborate seamlessly to bring that vision to life on screen.

Adaptability: Cinematographers often work in dynamic and unpredictable environments. The ability to adapt to changing conditions such as weather, lighting constraints, or unexpected challenges on set, is a key skill. Being flexible and resourceful allows cinematographers to overcome obstacles and deliver high-quality footage under varying circumstances.

On The Job Training and Practical: Camera Operation and Equipment Handling, Lighting Techniques, Set Etiquette and Collaboration, Problem-Solving and Adaptation and Post- Production Collaboration. Overall, on-the-job training and practical experience are crucial for aspiring cinematographers to apply theoretical knowledge in real-world scenarios, refine their skills, and build the confidence needed for a successful career in cinematography.

LIST OF EQUIPMENT

Cinematography involves the use of various equipment to capture and create visual images. The specific equipment used can vary depending on the production's scale, budget, and creative requirements. Here is a list of common cinematography equipment:

- 1. **Camera:** Digital Cinema Cameras (e.g., RED, ARRI Alexa, Black magic URSA Mini), DSLR Cameras (e.g., Canon EOS series, Nikon DSLRs) and Mirrorless Cameras.
- 2. Lenses: Prime Lenses, Zoom Lenses, Wide-Angle, Standard and Telephoto Lenses
- 3. **Camera Support:** Tripods, Camera Dollies, Steadicams or Gimbals for stabilizing shots and Jibs or Cranes for elevated and sweeping shots
- 4. **Lighting Equipment:** Continuous Lighting (e.g., LED panels, tungsten lights, fluorescent lights), HMI Lights for powerful daylight-balanced lighting and Grip Equipment (e.g., C-stands, flags, diffusion **materials**)
- 5. Audio Equipment: Boom microphones, Lavalier microphones, Audio recorders, Windshields and shock mounts for outdoor recording
- 6. **Monitoring and Playback:** On-camera monitors, Directors' Monitors, External Recorders and Playback Devices for reviewing footage on set.
- 7. **Camera Accessories:** Matte Boxes for controlling light and reducing lens flares, Follow Focus Systems for precise focus control, Filters, Lens Adapters and Mounts
- 8. **Power and Charging:** Batteries and Battery Chargers, AC Power Adapters and Power Distribution Units.
- 9. **Storage and Data Management:** High-capacity Memory Cards or SSDs, External Hard Drives for backup and Data Transfer and Card Reader devices
- 10.**Camera Bags and Cases:** Protective cases for cameras, lenses, and accessories and Camera backpacks or rolling cases for transportation
- 11.**Post-Production Equipment**: Editing Software (e.g., Final Cut Pro X, DaVinci Resolve), Color Grading Monitors and External Storage for post-production workflow.

This list provides a broad overview of the equipment used in cinematography, but the specific gear chosen often depends on the unique needs and constraints of each production. Professional cinematographers carefully select equipment based on factors like the desired visual style, budget and technical requirements of the project.

Module	Theory		On the Job Training		Total	
	Hours	weight age	Hours	weight age	Hours	weight age
Module-1	60	30%	140	70%	200	100%

SCHEME OF INSTRUCTION/MODULE

THEORY

- Introduction to filmmaking The Brief History of Cinema Basic Types of Movie Genres Brief History of World and Indian Cinema Latest Trends and Changes in Cinema Legends of Indian Cinema Popular and Contemporary Indian Cinema Film genre.
 10 Hours
- II. Stages of Filmmaking Pre-Production Production The Production stage requires the main working stage for the director, assistant director and DOP Digitalization of the motion picture Camera Operation Lighting and set design to understand the director's vision. Post Production Marketing and Distribution 10 Hours
- III. Evaluation of Film Camera: Image Sensor Resolution -Dynamic Range -Frame Rate -Low-Light Performance - Codec and Bitrate - Color Science - Lens Compatibility - Recording Format - Built-In ND Filters - Autofocus System -Price and Budget. Film Camera Lenses: Focal Length - Prime vs. 10 Hours
- IV. Zoom Aperture (T-stop) Lens Speed Image Stabilization -Lens Coatings - Build Quality - Autofocus System - Manual Focus Capability -Lens Mount Compatibility - Lens Distortion and Aberrations - Lens Compatibility with Filters.
 10 Hours
- V. Film Lighting Equipment: Key Light Fill Light Backlight Soft boxes and Diffusers - Reflectors - Light Stands -Grip Equipment - Barn Doors - Gels -Flag and Cutter - Lighting Control Grids - Dimmers - Light Meters - Practical Lights - Battery-Powered Lights - Fog and Smoke Machines 10 Hours
- VI. Operation of Film Camera: Loading Film Framing and Composition -Setting Aperture and Shutter Speed - Setting ISO/Film Sensitivity - Focusing -Exposure Metering - Setting Frame Rate - Setting White Balance - Checking Film Counter - Recording - Monitoring and Playback - Changing Film Rolls -Camera Maintenance 10 Hours

PRACTICAL

Create a documentary script based on a topic of your choice, and produce the corresponding documentary film.

I. Creating a Portfolio Short Film

Creating a short film can be an exciting and educational assignment for students. Create a short film in the genre of your preference. Submit the corresponding script, storyboard, and shooting script, along with the colour grading for the final film and its presentation.

II. Guidelines:

- Choose a theme that resonates with you. It could be a personal experience, a social issue, or a fictional concept. Ensure that the theme is clear and effectively communicated throughout the film.
- The short film should be between 5 to 10 minutes. Strive for conciseness while maintaining a compelling narrative.
- If possible, collaborate with classmates. Assign specific roles for each team member (director, cinematographer, editor, etc.) and work together to bring the project to life.
- Submit the final short film along with a brief reflection on your creative choices and the filmmaking process.

III. External viva voce Evaluation Criteria:

- Storytelling effectiveness
- Cinematographic techniques
- Sound design
- Editing proficiency
- Originality and creativity

This assignment is designed to encourage creativity, collaboration and a practical application of cinematography concepts. Have fun, and let your creativity shine!

Qualifications of Teaching Faculty:

- Diploma in Cinematography
- Master of Fine Arts (MFA) or a Ph.D. in a related field

External Examiner Qualifications:

- A master's or doctoral degree in cinematography, film studies, media production, or a related field.
- Experience teaching cinematography or related subjects at a recognized institution of higher education.

Reference books/websites:

- 1. "Indian Cinematography: A Short History" by Ranjan Dasgupta
- 2. "Directing and Producing for Indian Cinema: A Comprehensive Guide" by Roopa Swaminathan

Website Links:

- 1. Indian Cinematographers
- 2. Filmmakers Fans

Division of Marks:

Theory: 100 Max. Marks

- 1. Communicative English: 20 marks
- 2. Short Questions: $6 \times 5m = 30$ marks
- 3. Long Questions: 4x10 = 40 marks
- 4. Multiple Choice Questions: 10x1=10 marks
- Practical: 100 Max. Marks
 - 1. External: 40 marks
 - 2. Record/ Mini Project & Viva: 10 marks
 - 3. Internship/ OJT: 50 marks

STATE INSTITUTE OF VOCATIONAL EDUCATION O/o DIRECTOR OF INTERMEDIATE EDUCATION - TELANGANA, HYDERABAD SHORT TERM VOCATIONAL CERTIFICATE COURSE

REGD. No.: Time: 3 Hrs

Max Marks: 100

Cinematography MODEL QUESTION PAPER -THEORY

SECTION-A

Communicative English

20 Marls

Marks

SECTION-B

Note: a) Answer ALL questions. b) Each question carries 6 Marks.

6X5M=30

- 1. Explain the significance of pre-production in the filmmaking process.
- 2. Discuss the impact of digitalization on the motion picture industry.
- 3. Define the term "film genre" and provide examples of three different genres.
- 4. Outline the stages of filmmaking, including pre-production, production, and post-production.
- 5. Define the term "Dynamic Range" in the context of film cameras.
- 6. Discuss the role of key light, fill light, and backlight in film lighting setups. Provide examples of how each type of light contributes to the overall look and mood of a scene.

SECTION- C

Note: a) Answer any Four questions.

b) Each question carries **10 Marks**.

4X10M=40 Marks

- 7. Discuss the evolution of Indian cinema from its inception to the present day.
- 8. Analyze the impact of marketing and distribution strategies on the success of a film. Provide examples contributed to the box office success of films.
- 9. Compare and contrast the roles of the director, assistant director, and director of photography (DOP) during the production stage of filmmaking.
- 10. Explore the concept of film production design, Using examples from both Indian and international cinema,
- 11. Analyze the importance of lighting control equipment such as soft boxes, diffusers, and reflectors in film production Provide examples of how different lighting control techniques can be used to enhance storytelling.

12. Critically evaluate the role of exposure metering in achieving proper exposure in film photography. Provide two techniques for ensuring accurate exposure in challenging lighting conditions.

SECTION-D

SECTION-D					
Each question carries 1 Mark.	10X1 =10 Marks				
1. What is NOT a topic covered in the unit "Evaluation of Film Camera"?	()			
a) Lens Compatibility b) Film Distribution	× ×	,			
c) Autofocus System d) Price and Budget					
c) Autorocus System					
2. Which of the following is NOT a characteristic of film camera lenses?	()			
a) Autofocus System b) Lens Speed					
c) Lens Mount Compatibility d) Film Editing Techniques					
3. What is the primary function of a fill light in film lighting?	()			
a) To create dramatic shadows b) to evenly illuminat	the subject				
c) To separate the subject from the background d) to add color to the	scene				
4. What does the term "Dynamic Range" refer to in the context of film cameras?	()			
a) The range of colours a camera can capture b) The range of light	a camera can c	apture			
c) The range of focal lengths a lens can cover d) the range of shutte		-			
·)ggg	F				
5. What is the purpose of barn doors in film lighting?	()			
a) To diffuse light b) To control spill light)			
	111				
c) To measure light intensity d) to reflect light					
	1	`			
6. Which stage of filmmaking involves loading film, framing, and composition?	()			
a) Pre-Production b) Production					
c) Post Production d) Distribution					
7. What is the purpose of diffusers in film lighting?	()			
a) To soften and spread light b) To control light direction					
c) To increase light intensity d) To create shadows					
8. What does the term "Frame Rate" refer to in film camera evaluation?	()			
a) The number of frames per second captured by the camera					
b) The size of each frame in the image sensor					
c) The rate at which the lens can focus					
d) the amount of light reaching the image sensor					
d) the amount of right redening the image sensor					
9. Which aspect of film camera lenses refers to the ability to change the focal lenge	gth? ()			
3. Which aspect of thin camera lenses refers to the ability to change the focal leng)			
a) Drima va Zaam (h) Lang Snood					
a) Prime vs. Zoom b) Lens Speed					
c) Image Stabilization d) Autofocus System					
10. What is the purpose of a light meter in film lighting? (
a) To measure light intensity b) To diffuse light					
c) To control light direction d) To soften light					

STATE INSTITUTE OF VOCATIONAL EDUCATION O/o DIRECTOR OF INTERMEDIATE EDUCATION, TELANGANA. NAMPALLY, HYDERABAD. SHORT TERM VOCATIONAL CERTIFICATE COURSE

Cinematography MODEL QUESTION PAPER –PRACTICAL

Answer ALL questions.

40 Marks

Total Marks: 40

Q1. (30 Marks): Set up a camera for a basic interview shot. Instructions:

- Choose an appropriate camera and lens for the interview setting.
- Position the camera and set up the frame for a medium shot of the interviewee.
- Adjust the camera settings for optimal exposure and focus.
- Ensure proper white balance.
- Set the appropriate audio levels for recording.

Or

Execute a focus pull during a scene. Instructions:

- Set up a scene with at least two subjects at different distances from the camera.
- Plan and mark the focus points on each subject.
- Execute a smooth focus pull from one subject to another during the shot.

Q 2. (10 Marks): Write the step-by-step process in the given answer sheet.

Mini-project & Viva:

•	Record	10 Marks
•	Internship/OJT	50 Marks
