

Please note that all course descriptions and curriculum detail herein are subject to change. Instructors may present course content in different sequence and/or otherwise vary course content and structure according to their wishes. Specific classes may or may not be taught on all campuses, and may be consolidated and/or eliminated due to demands of attendance, staffing, equipment, facilities, and/or space.

Camera Training Program

Objective: To train Connecticut residents in the basic duties and practices of the camera department.

Program Synopsis: The first week will involve an overview of the camera department, along with detailed lessons on different types of camera movement and setup, along with loading film.

The second week will include practical exercises in setting up the different types of camera movement, along with a one-day exercise in storyboarding a short scene.

The following lesson plan defines specific subjects to be covered in the training program and is required as a basis for instruction for each component. Within the described daily and weekly framework of the program, the grantee and/or hired instructor are encouraged to supplement the curriculum as they see fit.

Because all feature film positions and departments are not currently included in the training program, the use of guest speakers is encouraged as an enhancement to the lesson plan. Recommended guest speakers for the Camera training program include: Director of Photography, First Assistant Director, Script Supervisor, and Accountant.

Required Texts: The Camera Assistant: A Complete Professional Handbook, by Douglas C. Hart, Focal Press, 1995. The Camera Assistant's Manual, Fourth Edition, David E. Elkins, Focal Press, 2005.

Half-Day Introductory Lecture Camera Department

- Job Categories within the Department
- Pre-production, Production, & Post-Production
- Putting the Camera Together
- Film Stocks, Magazines, and Digital Images
- Preparing Camera Reports
- Instructor will Assemble 35mm Camera and Take it Apart

- Handling Film, Loading Magazines, and Dealing with the Lab
- Instructor will Demonstrate Operation of HD Camera
- Lenses and Focus Pulling will be Demonstrated

Week One, Day One

9:00 – 10:25am: Basic Workings of the Camera, Part 1

- Box with motor of different speeds
 - Talk about different frame rates
- Shutter angle
 - Persistence of vision
- Aperture
- Camera speeds

10:25 – 10:35am: Break

10:35am – 12:00pm: Basic Workings of the Camera, Part 2

- Color correction
- Gels
 - Behind lens
 - In front of lens
- Filters
 - Correcting for daylight

12:00 – 1:00pm: Lunch

1:00 – 3:00pm: Basic Workings of the Camera, Part 3

- Lens
 - Aperture
 - Focal length
 - Longer length makes world look bigger
 - Depth of field
 - Show depth of field chart

3:00 – 5:00pm: Basic Workings of the Camera, Part 4

- Film stocks
 - Daylight
 - Tungsten
 - Speeds
 - Graininess
 - When to pick one or another

Homework: Related readings

Week One, Day Two

9:00 – 10:25am: Positions of the Camera Department, Part 1

- Director of Photography
 - Runs crew
 - Camera
 - Grip
 - Electric
 - In charge of creating look of film
- Camera Operator
 - Intermediary for above the line
 - Director
 - Director of Photography
 - Actors
 - Must know whether a shot is good immediately after a take
- 1st Assistant Cameraman
 - Oversees department
 - Operation of camera
 - Filters for actors
 - Exposure
 - Focus

10:25 – 10:35am: Break

10:35am – 12:00pm: Positions of the Camera Department, Part 2

- 2nd Assistant Camera
 - Supports 1st AC
 - Manages loader
 - Lays down marks for actors
 - Changes lenses
 - Manages paperwork and expendables
 - Inventories equipment
- Camera Loader
 - Loads and downloads film from magazines
 - In charge of all film inventory
 - Can cover schedule as well
- Camera Trainee
 - Runner for truck and set
 - Gets coffee for DP
 - Pushes video cart around

12:00 – 1:00pm: Lunch

1:00 – 3:00pm: Rehearsals

- DP sets up shots

- Operator observes
- 1st AC sees what configuration camera is in
 - Handheld
 - Dolly
 - Sticks
- Sees what lenses are needed
- 2nd AC marks the set so actors know where they're standing
- Loader loads film

3:00 – 5:00pm: Practical Exercise

- Trainees will go through mock rehearsals, operating in each position of the camera department

Homework: Related readings

Week One, Day Three

9:00 – 10:25am: Pre-Production for Camera Department

- Registration pin tests
- Camera tests
 - Actors/actresses shot with different wardrobe or makeup
- Prepping camera gear
- Exercise: Trainees will see equipment laid out for prep

10:25 – 10:35am: Break

10:35am – 12:00pm: Post for Camera Department

- Inventory of film
- Put together list of loss and damage
- Exercise: Trainees will go through paperwork

12:00 – 1:00pm: Lunch

1:00 – 3:00pm: Loading Film

- How to do it
- Where to do it
 - Darkroom
 - Film tents
- Instructor will show with dummy loads

3:00 – 5:00pm: Practical Exercise

- Trainees will load dummy loads into film magazines

Homework: Related readings

Week One, Day Four

9:00 – 10:25am: Special Equipment, Part 1

- Dolly
 - What it is
 - How it works
 - Class will see it hands-on
 - Mounting of camera

10:25 – 10:35am: Break

10:35am – 12:00pm: Special Equipment, Part 2

- Cranes
 - Manned
 - Unmanned
 - Class will see them hands on

12:00 – 1:00pm: Lunch

1:00 – 3:00pm: Special Equipment, Part 3

- Steadicam
 - Working as operator
 - Working as assistant
 - Class will try equipment out

3:00 – 5:00pm: Special Equipment, Part 4

- Handheld camera movement
 - Building the rig
 - Working with it
 - As operator
 - As assistant
 - Class will try equipment out

Homework: Related readings

Week One, Day Five

9:00 – 10:25am: Preparing for Weather

- Hot weather
 - Hats
 - Glasses
 - Sunscreen

- Extra T-shirts and socks
- Cold weather
 - Jackets
 - Waterproof boots
- Rainy weather
 - Rain jackets
 - Waterproof clothing

10:25 – 10:35am: Break

10:35am – 12:00pm: Intro to High Definition Video Cameras

- HD Technician will come in to show Varicam or similar camera
- Differences between film and video
- Differences in crew
 - No loader needed for HD
 - Loader, in effect, becomes 2nd 2nd AC

12:00 – 1:00pm: Lunch

1:00 – 3:00pm: Intro to High Definition, Part 2

- Image quality
- Adjustment of image
- Watching clips of film vs. video

3:00 – 5:00pm: Practical Exercise

- Trainees will shoot video with HD camera, according to specifications from instructor

Homework: Related readings

Week Two, Day One

9:00am – 12:00pm: Practical Exercise – Rack Focusing

- Trainees will build camera
- Set up for camera setup involving rack focusing
- Footage will be recorded off of tap monitor for playback
- After shooting, class will break down camera
- Class will watch footage to see how they did
 - Focus
 - Composition
 - Smoothness of shot

10:25 – 10:35am: Break

12:00 – 1:00pm: Lunch

1:00 – 5:00pm: Practical Exercise – Whip Pans

- Trainees will build camera
- Set up for camera setup involving whip pans
- Footage will be recorded off of tap monitor for playback
- After shooting, class will break down camera
- Class will watch footage to see how they did
 - Focus
 - Composition
 - Smoothness of shot

Homework: Related readings

Week Two, Day Two

9:00am – 12:00pm: Practical Exercise – Handheld

- Trainees will build camera
- Set up for camera setup involving handheld shooting
- Footage will be recorded off of tap monitor for playback
- After shooting, class will break down camera
- Class will watch footage to see how they did
 - Focus
 - Composition
 - Smoothness of shot

10:25 – 10:35am: Break

12:00 – 1:00pm: Lunch

1:00 – 5:00pm: Practical Exercise – Steadicam

- Trainees will build camera
- Set up for camera setup involving a steadicam shot
- Footage will be recorded off of tap monitor for playback
- After shooting, class will break down camera
- Class will watch footage to see how they did
 - Focus
 - Composition
 - Smoothness of shot

Homework: Related readings

Week Two, Day Three

9:00am – 12:00pm: Practical Exercise – Focus and Filters

- Trainees will build camera
- Set up for camera setup involving special focus and filter options
 - Polarizer on cars
 - Diffusion on an actor
- Footage will be recorded off of tap monitor for playback
- After shooting, class will break down camera
- Class will watch footage to see how they did
 - Focus
 - Composition
 - Smoothness of shot

10:25 – 10:35am: Break

12:00 – 1:00pm: Lunch

1:00 – 5:00pm: Practical Exercise – Dolly

- Trainees will build camera
- Set up for camera setup involving a dolly move
- Footage will be recorded off of tap monitor for playback
- After shooting, class will break down camera
- Class will watch footage to see how they did
 - Focus
 - Composition
 - Smoothness of shot

Homework: Related readings

Week Two, Day Four

9:00am – 12:00pm: Practical Exercise – Depth of Field

- Trainees will build camera
- Set up for camera setup involving depth of field
- Footage will be recorded off of tap monitor for playback
- After shooting, class will break down camera
- Class will watch footage to see how they did
 - Focus
 - Composition
 - Smoothness of shot

10:25 – 10:35am: Break

12:00 – 1:00pm: Lunch

1:00 – 5:00pm: Practical Exercise – Crane

- Trainees will build camera
- Set up for camera setup involving a crane shot
- Footage will be recorded off of tap monitor for playback
- After shooting, class will break down camera
- Class will watch footage to see how they did
 - Focus
 - Composition
 - Smoothness of shot

Homework: Trainees will take home a two-page script of an action scene, and will come up with ideas as to how to shoot the scene. The scene will be shot the next day.

Week Two, Day Five

9:00am – 12:00pm: Practical Exercise – Storyboarding

- Trainees will discuss ideas on how to shoot action sequence
 - Shutter angles
 - Camera movement
 - Rack focusing
 - Other ideas
- Instructor will take ideas from trainees to come up with a storyboard for the scene

10:25 – 10:35am: Break

12:00 – 1:00pm: Lunch

1:00 – 5:00pm: Practical Exercise – Shooting Action Sequence

- Trainees will build camera
- Set up for scene they storyboarded in the morning
- Footage will be recorded off of tap monitor for playback
- During shooting, footage will be roughly cut together on laptop
- After shooting, class will break down camera
- Class will watch edited footage to see how they did
 - Focus
 - Composition
 - How close they stayed to storyboards