

Working with a digital video camera

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Getting started

■ Do you have the following items?

- One or more blank video tapes
- A fully charged battery
- Additional accessories such as a microphone and lights
- Firewire cable
- USB Cable
- Power lead

■ Check the lighting, the angle of the shoot, the microphone and the camera settings.

■ When you are ready you need to switch the camera to record (or camera) mode.

Getting started

- Remember, when you are ready you need to switch the camera to record (or camera) mode.



Commonsense

- Use the strap
- Avoid water
- Avoid excessive heat
- Check for misting in humid or cooler conditions
- Take care when inserting and removing the battery
- Label the camera and all of the accessories

Next steps

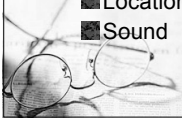
- Remove the lens cap.
- Aim the camera and frame the scene you wish to shoot.
- Press the record button. Make sure you are actually recording. You may have accidentally pressed the record button when you were setting up the camera.

Remember...

- It is also wise to keep in mind the following questions in the initial planning stages of your movie project.
 - What is the subject of my movie?
 - How do I want my movie to look and feel?
 - Who is the audience?
- How much time and effort can I devote to the movie?
- Record the action and the scenes you have set out in your storyboard.

Setting up a camera shoot

- Operating the video camera
- Shooting style: close up, medium shot, wide shot.
- Lighting: spot, fill, sharp.
- Camera angle: low, high, front, back, combinations.
- Camera movement: panning and tilting
- Location
- Sound



Camera techniques

- Simple shots
 - Little or no camera movement or zooming.
 - Forms the basis of your best clips
 - You can capture a scene from various angles without resorting to techniques such as zooming and panning



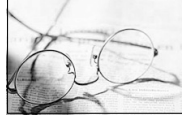
Camera techniques

- Zooming
 - Can be used to emphasize an important moment of dialogue
 - If you need to zoom simply plan your shot, slowly zoom in on the subject and then hold the shot for several seconds
 - Zooming is appropriate, for example, if you intend to emphasize an important piece of dialogue
 - You may also use zooming to establish a scene



Camera techniques

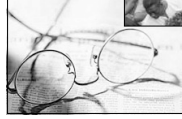
- Zooming



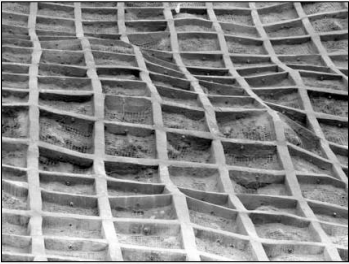
Camera techniques



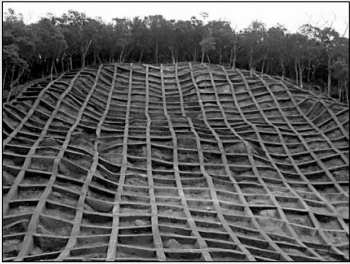
Camera techniques




Camera techniques




Camera techniques



Camera techniques



Camera techniques




Camera techniques

- **Zooming**
 - Generally speaking it is wiser to avoid the use of zoom
 - It can be a challenge to edit a clip that includes scenes with rapid zooming
 - Such shots may be blurred or distorted. Movies with excessive zooming can also be distracting for the viewer
 - Keep in mind that it is easier to edit a still scene in comparison to a scene that has a lot of movement

Camera techniques




Camera techniques



...to get the best possible quality, you should use the camera's optical zoom range. This provides the best quality and the most natural-looking image. When you use digital zoom, the image is enlarged and the quality is reduced. This is because the camera is using software to enlarge the image, which results in a loss of detail and a loss of sharpness. To get the best possible quality, you should use the camera's optical zoom range. This provides the best quality and the most natural-looking image. When you use digital zoom, the image is enlarged and the quality is reduced. This is because the camera is using software to enlarge the image, which results in a loss of detail and a loss of sharpness.

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Camera techniques


- **Zooming**
 - Avoid using the camera's digital zoom feature
 - If you apply too much zoom using the camera's digital zoom feature the picture will pixellate and 'break up'
 - It is wise to confine any shots that employ zooming within the camera's optical zoom range
 - Find out how to switch off digital zoom on your camera

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Camera techniques

■ What is panning and tilting?

- Panning is rotating the camera through a horizontal plane
- Tiltting is rotating the camera through a vertical plane.

- You can use these techniques, for example, to capture the movement of a plane or a moving vehicle. You may wish to capture a landscape or a tall building.



Camera techniques

■ Panning and tilting

- It is best practice to pan from left to right
- Pan slowly and carefully
- It is wise to test the panning shot a few times before you actually take the final shot
- You can afford to shoot the scene several times



Camera techniques



Camera techniques



Camera techniques

■ Panning and tilting

- Best achieved with the use of a camera tripod.
- If you do not have a tripod then ensure your footing is steady and hold the camera close to your body
- Twist your body and maintain your firm footing as you capture the scene
- If the camera has a flip-out viewfinder use it as an aid to plan and frame your scene



Camera techniques

■ Panning and tilting

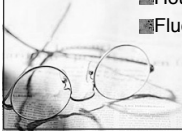


Camera techniques

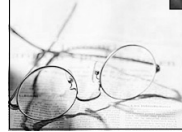
■ Lighting

- The type of lighting that dominates the scene you are shooting can have an effect on the colour of your movie

- Daylight has a blue hue
- Household light bulbs have a yellow hue
- Fluorescent lights have a green hue



Camera techniques



Camera techniques



Camera technique

■ Lighting

- Your digital video camera will usually do a good job compensating for these differing light and colour hues
- You can use the camera's lighting presets to manually adjust for a particular lighting environment
- If you are shooting indoors, for example, then select the camera's preset for indoor light



Camera technique

■ Lighting

- You should remember to make sure that the subject of your scene is brighter than the background
- Check that the brightest source of light is behind you
- Take care not to shoot reflective surfaces that may direct light into the camera lens
- Never point the camera in the direction of the sun



Camera technique

■ Auto focus

- The auto focus feature of your digital video camera usually does a good job of keeping your subject in focus
- There will be times when the camera's auto focus feature will let you down
- You may be shooting through a window or there may be a fence or some other sort of obstruction in the foreground that interferes with the camera's ability to focus on your desired subject



Camera technique

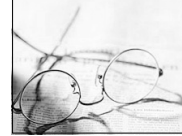
■ Auto focus

- Switch to the camera's manual focus feature when auto focus is your second choice
 - Simply select manual focus
 - Zoom in on the subject and then manually adjust the focus by gradually rotating the focus ring that surrounds the camera lens. Once the subject is clearly in focus you can then shoot the scene
 - Even if you shoot a close up or a distant shot the subject will remain in focus.



Camera technique

■ Auto focus



Types of shots

■ Wide shots



- A wide-angle shot can capture the entire scene.
- You can use these wide shots to establish the scene and to begin your story.



Types of shots

■ Medium Shots



- These shots allow you to pay closer attention to the subject of your story
- The subject is in closer view and other non-essential objects in the scenery are out of view

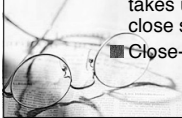


Types of shots

■ Close-up shots




- When you shoot a scene in which the subject takes up the entire viewing area this is known as a close shot or a tight shot
- Close-ups can reveal details



Types of shots




Types of shots




A black and white close-up photograph of several flowers, possibly hydrangeas, covered in water droplets. The background is blurred, showing more foliage. The image is centered on a slide with a background of a spiral notebook and a pair of glasses.

Types of shots



A black and white close-up photograph of several flowers, possibly hydrangeas, covered in water droplets. The background is blurred, showing more foliage. The image is centered on a slide with a background of a spiral notebook and a pair of glasses.

Types of shots




A black and white close-up photograph of a human eye, looking directly at the camera. The eye is the central focus, with the surrounding skin and eyelashes visible. The image is centered on a slide with a background of a spiral notebook and a pair of glasses.

Camera angles


- Multiple angles
- You do not always have to point your camera directly at the subject in a horizontal plane
- You may like to consider vertical angles taken from above or below the subject

Camera angles




A black and white low-angle photograph of a building's facade, showing a triangular structure against a cloudy sky. The perspective is from below, looking up. The image is centered on a slide with a background of a spiral notebook and a pair of glasses.

Camera angles




A black and white photograph of a cityscape at night, with buildings illuminated and their lights reflected in a body of water in the foreground. The image is centered on a slide with a background of a spiral notebook and a pair of glasses.

Camera angles




A black and white photograph of a cityscape at night, with buildings and lights reflected in a body of water. The camera angle is a low-angle shot, looking across the water towards the city.

Camera angles




A black and white photograph of a cityscape at night, similar to the first image but from a different angle, showing a different set of buildings and their reflection in the water.

Camera angles




A black and white photograph showing a long, straight path of large, dark rocks leading towards a building in the distance. The camera angle is a low-angle shot, looking down the path.

Camera angles




A black and white close-up photograph of a large number of small, dark, rounded stones or pebbles stacked together, creating a textured surface.

Camera angles




A black and white photograph taken from a high vantage point, looking down at two long, narrow, dark structures (possibly walkways or balconies) that run parallel to each other on a high-rise building.

Camera angles




A black and white photograph showing a reflection of a person standing in a window of a tall building. The person is silhouetted against the bright light coming from outside.


Camera angles




Camera angles



Camera angles



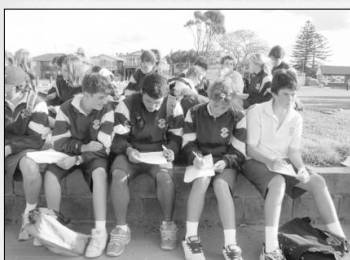
Camera angles



Camera angles

- Multiple angles
 - You may wish to capture a conversation between two people from above and behind in addition to your normal shot
 - The alternative angles may simply be dummy shots that involve no dialogue at all
 - When you edit the movie you can then creatively insert the various additional angles yet maintain the same piece of dialogue
 - "How-to" movies also benefit from the use of a wide variety of angles

Camera angles



Camera angles



Camera angles



Camera angles



Framing

■ Framing your shot

- You can make your movie interesting if you take care to frame significant shots
- How can you frame your shot?
 - You may use a doorway, hallway, trees or even the lines of a garden

Framing

■ Framing your shot




Framing

■ Framing your shot



Framing


- Framing your shot



Framing

- Framing your shot
 - The frame directs the viewer to the subject of your scene.
 - You may make creative use of shadows and light to frame your subject
 - In the image on the next slide the pedestrian mall and the shops on either side serve to provide a stage and a frame for the shopping crowds

Framing



Framing



The Rule of Thirds


- What is the 'Rule of Thirds'?
 - Imagine your scene evenly subdivided by two horizontal and two vertical lines
 - A grid with nine rectangles is superimposed upon your scene
- How can this grid help with your movie making techniques?

The Rule of Thirds

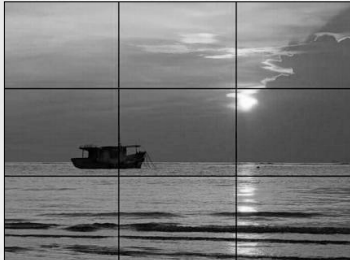
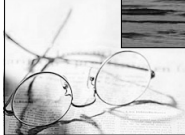
- The grid allows you ensure that not every scene in your movie has an emphasis upon the centre of the frame
- You can frame actors or subjects so that they are aligned with the vertical grid lines
- Horizons, for example, can be aligned with the either of the horizontal grid lines
- You can creatively direct attention to the subject by using this technique

The Rule of Thirds


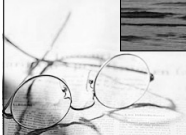
- Look carefully at the next image
- Notice that the boat and the sunset are aligned with the vertical lines
- The horizon is aligned with the lower horizontal line
- The rule of thirds has allowed the cameraperson to compose a scene that directs the viewer's attention to the important elements within the scene.



The Rule of Thirds





The Rule of Thirds

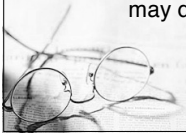
Dolly shots

- What is a dolly shot?
 - A dolly or tracking shot is one in which the camera is moving whilst you shoot the scene
 - You may wish to employ a trolley, tricycle or even a wheelchair to capture this type of scene




Check the background

- As you compose the scene and plan your shot make a note of the background
 - What can you see?
 - What will the viewer see?
 - Is there anything in the background that may distract the viewer?



Check the background

- Distractions include:
 - Billboards
 - People
 - Animals
 - Litter
 - Obtrusive shadows
 - Glass
 - Mirrors
 - Doors
 - Signs



Check the background

- You do not wish to shoot a scene that reveals yourself in a mirror
- Imagine the reaction of your audience if you unwittingly capture an unfortunate juxtaposition involving an advertising slogan that conveys a message that contradicts the subject line of your own movie

Noise

- It is wise to listen closely to the noise that pervades the environment in which you wish to capture your shots
- You may not be aware of the multitude of noises that can impact upon the soundtrack of your movie
 - Traffic, aircraft, ticking clocks, footsteps, telephones,... more?

Noise

- Even though the noises may be distant they can be a source of distraction for the audience
- You may need to use a lapel microphone or a shotgun microphone to ensure that unwanted ambient noises do not interfere with the creation of your movie

Now to work...

- Pair up with one other participant...
- Collect a camera...
- Venture out to the campus
- Spend 45 minutes collecting 5 minutes or so of digital video footage
- Return to the training room
- Then we shall experiment with uploading the video data via firewire or usb streaming