DIY FILM SCHOOL
Introduction

Smartphones are owned by two thirds of the population in the UK. A decent camera is an essential attribute of any smartphone and the ability to record high definition and even 4k footage is becoming the norm. Broadcasters and video professionals are increasingly looking to mobile filmmaking as a way of creating new and exciting content. There are several key advantages to filming on mobiles:

We almost always carry our mobile devices. Essentially we have a high quality video camera and a means to record and broadcast content available at all times. It’s more immediate and more portable than a traditional camera rig.

Smartphones have overtaken laptops as the preferred device for accessing the internet. Users who routinely carry out complicated tasks on mobile devices may be less confident using an unfamiliar camera. Filming on a smartphone removes that barrier.

Many apps available for smartphones significantly improve the manual control of a device’s camera and also enable high quality film making, editing and post production functions. Moreover, access to internet enables the video maker to upload and publish their content easily. Services such as The University of Edinburgh’s Media Hopper platform (https://media.ed.ac.uk) allow film makers to create, store, share and publish their media content easily.

The availability and relatively low cost of mobile devices has given many more people the opportunity to create professional media content.
Landscape

From television screens, to cinemas audiences are used to watching film in a specific way. Landscape is the most common orientation for video footage. Allowing the filmmaker to get as much of a scene in shot as possible.

But mobile filming in portrait is a common and understandable mistake. After all that is how you hold your phone when answering calls. However, it is important that you film in landscape orientation.

Landscape makes your footage generally more pleasing to the eye and more enjoyable to watch on other devices. So remember do not hold your phone vertically while shooting unless there is a specific reason.

FAST FACT

It’s Video
Videos are almost always presented horizontally in landscape.

It’s Nature
Our vision allows us to see more to the left and right than top and bottom.

Everything Is Landscape
Television, computer and cinema screens are all landscape!
Framing

Now that you know to film your footage in landscape we can concentrate on framing the shot. By framing we mean arranging the elements in your scene to create an effective composition.

How you frame a shot is entirely subjective but there are some simple rules that can be applied which make footage more interesting. If you are filming an interview filling the frame with as much of the subject as possible or placing your them slightly off centre helps create a more visually interesting scene.

Divide your scene into a grid consisting of 9 sections. There are now two equally spaced vertical and horizontal lines. The main subject should be placed on these lines as opposed to centred. This technique is know as the Rule of Thirds https://en.wikipedia.org/wiki/Rule_of_thirds.

Horizontal and vertical lines such as lampposts and horizons can be used as guides. It is good practice to ensure they appear as straight and level as possible.

FAST FACT

Be Simple

Keep your composition simple and allow the audience to focus on your subject. Be aware of anything in the shot that may be distracting and frame your shot to accordingly.

Shot types

Close ups, mid shots and wideshots give the filmmakers options and also help when making cuts.

Different types of shot also lend themselves to different narratives and situations. A close-up is great for an interview or to add emotional depth, while a wide shot is great for action and setting the scene.
Be Stable

Jerky video, although sometimes stylistically desirable, is often an indication of badly shot footage. However, it is one of the easiest problems to rectify. The simplest solution is get a tripod. There are many tripods suitable for mobile devices available. Ranging from inexpensive desktop tripods, to broadcast quality devices and even steady cam rigs.

We don’t always carry a tripod, so if one is not available use both hands to hold your smartphone as close as possible to your body as you record the video. Or alternatively use tables, chairs, desks and shelves to give you added support when filming.

FAST FACT

Framing

A tripod is the supreme image-control device, allowing you to compose the picture perfectly using its panning, tilting and center post height adjustments.

Camera Stabilisation

Avoid using your phones in built image stabilisation, this just crops the image and reduces image quality. Nothing beats a tripod!
Zoom

Smartphones have digital zooms. A digital zoom works by essentially focusing on a portion of the image scaling and cropping it to give the impression of zooming, however, a considerable amount of image quality is lost. This can result in pixilation or softness.

It is better to avoid using your smartphone’s zoom. If at all possible just get physically as close to the subject as possible. This will enable you to get tight shots and close ups without sacrificing image quality.

There are several clip on lenses available for mobile devices that allow actual zooming without a loss in picture quality.

FAST FACT

Digital Zoom

A digital zoom takes a portion of the image and enlarges it. In other words, the camera crops a portion of the image and then scales it to fill the frame. Subsequently, you lose image quality. If you’ve been using a digital zoom and wondered why your pictures did not look that great, now you know.

Optical Zoom

Optical zoom changes the magnification of images with the actual optical glass before the images reach the imaging sensor.
Lighting

Shooting in bright natural light is ideal when using a smartphone. Filming in low light often results in grainy, noisy footage. Also avoid pointing your camera at bright light sources. A subject shot in front a bright window will result in the a darkened silhouette and your shot will be ruined.

Natural light is great but you can use domestic lights to help illuminate your scene but a better alternative would be one of the many inexpensive camera lights on the market. We have several available that can be loaned out on request.

**FAST FACT**

**Manual control**

A smartphone will automatically adjust exposure as a reaction to changes in light. This often results in unwanted effects. Subsequently, It is desirable to have as much manual control as possible.
Audio

Audio is potentially the most important and the most over looked aspect of video. The built in microphones in smartphones are generally of a low quality and often in the wrong place resulting in poor and often unusable audio. When shooting video professionally filmmakers often use an external recording device and sync the audio in the edit. However, separate audio recorders can be both impractical and expensive for DIY video producers.

Your audio can be greatly improved by using an external microphone. There are a wide range of mobile microphones available and even the most inexpensive would result in some improvement in audio quality. If you don’t have a microphone stay as close to the audio source as possible.

If possible shoot your video indoors and in a quiet location avoiding excessive environmental noise and wind.

FAST FACT

It is more important!

Several studies have shown that if the audio quality is poor, that no matter how good the picture is viewers are more likely to react negatively to the video content as a whole.
Be prepared

Finally the key to a successful shoot is being prepared! Filmmaking can take many different forms. But whether you are looking to capture some beautiful scenery, film your favourite sport, or produce a scripted drama having all of your assets in place is essential for a successful shoot. Ensure your transport, script, storyboard, locations, interviewees, actors and gear are all in place and don’t forget to check the weather!

Shooting video on your smartphone can use up a lot of storage space, so make sure you have plenty available. Using your phone for video recording will drain your battery very quickly so being organized and not wasting time is essential.
Useful links

Creating and using storyboards.


Phone Photograph and Video shooting on iOS 9 - good way to understand the built in tools on iPhones, along with fundamentals on new/complex features, etc.

https://www.lynda.com/iOS-tutorials/iPhone-iPad-Photography-iOS-9/419364-2.html

iPhone Photography, from Shooting to Storytelling - More on photography, but a nice introduction to understanding how images can tell a story, how you can use filters to enhance an image, etc.

https://www.lynda.com/Photography-tutorials/iPhone-Photography-from-Shooting-to-Storytelling/90813-2.html

Boot Camp for Audio Mixing - This course mostly focuses on Pro Tools, but the foundations about understanding an audio mix are be useful

https://www.lynda.com/Pro-Tools-tutorials/Welcome/87006/93190-4.html

A playlist of courses about shooting video on DSLR’s, which go in depth in to different topics like lighting, sounds, etc.

https://www.lynda.com/SharedPlaylist/6c2a08cc70994b08a60ea83adf1b2bdc?org=ed.ac.uk

Video Post Production for Low-Budget Films - Goes a bit in to the business side of releasing films, but some good videos here about organisation, selecting takes, etc.

https://www.lynda.com/Audio-Video-tutorials/Video-Post-Production-Low-Budget-Films/457873-2.html

Mixing a Short Film with Logic Pro - Using Logic Pro and Final Cut to do a start-to-finish audio mix

https://www.lynda.com/Logic-Pro-tutorials/Mixing-Short-Film-Logic-Pro/111778-2.html
Mobile filmmaking kit

Below is some of the kit we will be using in the sessions. It should also be noted that this kit is also available for loan.

**Mobile device rigs**
- ShoulderPod R1 Pro
- ShoulderPod R1 Pro
- ShoulderPod S1
- iOgrapher iphone6 educational kit
- iOgrapher iphone5 educational kit
- iOgrapher Go for Android
- iOgrapher Filmmaking Case Kit for Apple iPad Mini Retina
- iOgrapher Filmmaking Case Kit for Apple iPad Air and iPad
- Beastgrip Pro + DOF adapter + wide-angle lens + fisheye lens

**Mobile Audio**
- Rode VideoMic GO
- Deadcat Go

**Mobile Lighting**
- Manfrotto LED Mini 24
- 3 point light kit

**Mobile Accessories**
- Portable Green Screen - Westcott 409 Creation Kit
- DJI Osmo
- Rode Filmmaker kit
- Manfrotto Compact Action Tripod