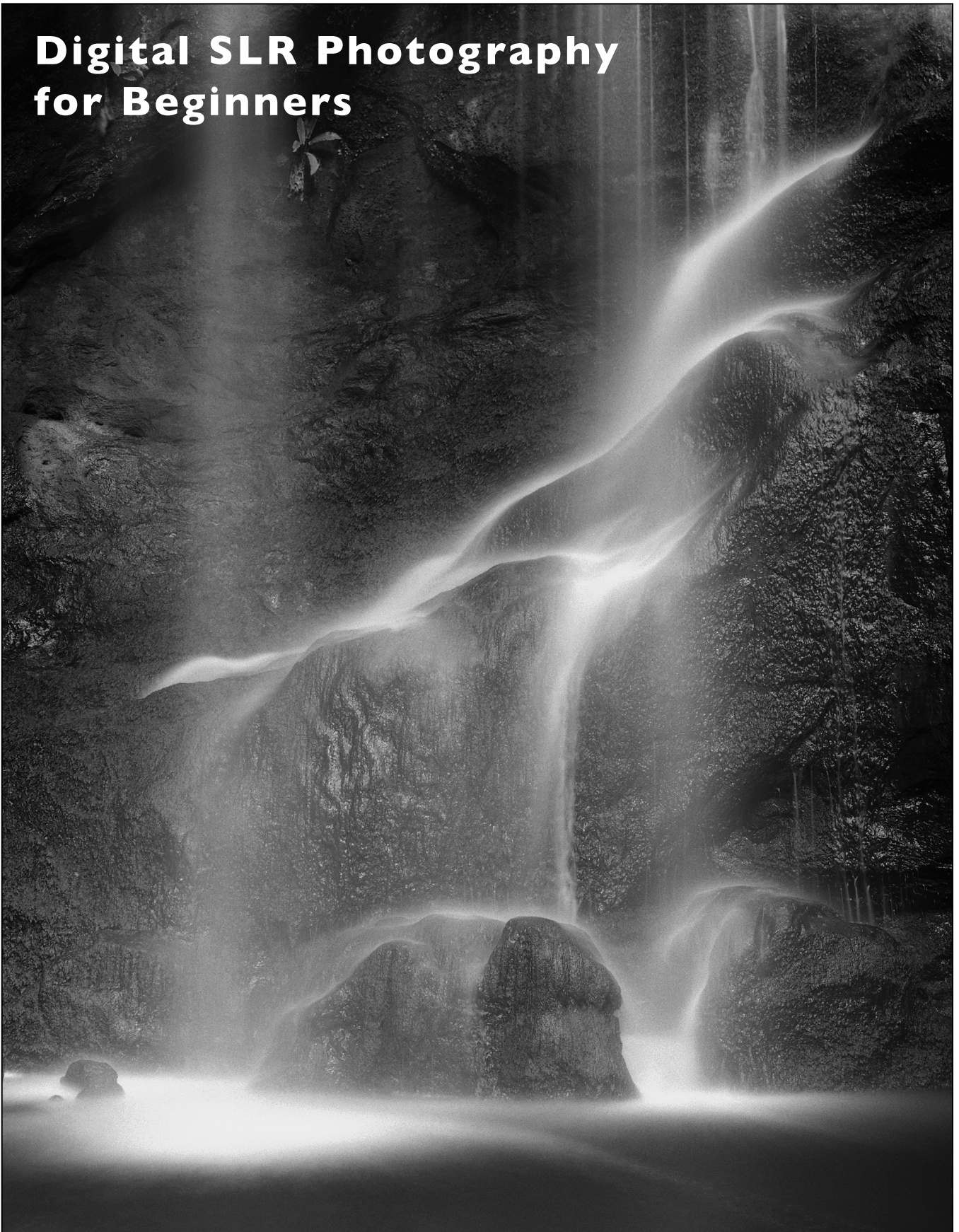


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Digital SLR Photography for Beginners



Course Notes



ISO SETTINGS

The ISO setting of your camera is used to adjust the sensitivity of its sensor – in other words, how quickly it reacts to light. In good light, you should set it as low as possible, eg 100 or 200, but in low light conditions, you will need to set it higher, eg 400, 500 or even higher. The advantage of using the lower settings is that your images will be of better quality because for every increase in ISO, there will be a small deterioration in image quality. This is known as ‘noise’ and it’s simply an overall increase in graininess.

Be aware of your ISO settings because when you’re shooting outdoors, the light conditions can change quite often and for best quality results, you should always try to shoot at the lowest practical ISO setting. However, a good slightly grainy image is better than no image at all so don’t be frightened by using the higher ISO settings – in some conditions, such as parties or live gigs, a grainy style can actually look really good.



EXPOSURE

Achieving a correctly exposed image is as important as achieving one that is sharp. In most cases, if you shoot an image that accurately resembles what your eyes saw at the time, the exposure is likely to be accurate. If the image looks significantly lighter or darker, the exposure is wrong and understanding how to get it right every time is clearly very important. It’s not difficult to understand and once you have grasped the basic concept, it will benefit your photography for the rest of your life! Exposure is a three-way equation consisting of (1) ISO, (2) aperture and (3) shutter speed. They are all inversely proportional and all relate to the amount of light you allow through your lens at the moment of shooting the image. ISO has been covered above, so let’s look at aperture and shutter speed.



APERTURE

The aperture setting of your lens governs the width of the lens opening at the moment you shoot the image. Every lens has a range of aperture settings ranging from wide to narrow and obviously, a lens that is set to a wide aperture will allow a lot more light into the camera than a lens that is set to a narrow aperture. Lens apertures vary according to the manufacturer and lens type, but one thing they all have in common is that the lower the aperture number, eg f2, f2.8 or f4, the wider the lens is opening - therefore the higher the aperture number, eg f11, f16 or f22, the narrower the lens is opening.

Apart from the aperture setting being an important part of achieving a correct exposure, it has a huge impact on the resulting style of the image. We'll look at that in the STYLE section below.



SHUTTER SPEED

Shutter speed is the third vital component in the three-way exposure equation and it is usually measured in fractions of a second, eg 1/60, 1/125 or 1/250. Most handheld photography is done at shutter speeds of 1/60 of a second or faster because at the slower shutter speeds, eg 1/30, 1/15 or 1/8, you are likely to suffer from camera shake and blurred images. This can be avoided with the use of a tripod of course and if you are using one, it doesn't matter how slow your shutter speeds are because the camera will remain completely still and steady during the exposure.

In most circumstances, unless you are setting out to achieve a specific visual effect relating to either slow or high speed, you need not worry about shutter speed providing there is enough light to allow you to handhold your camera with a shutter speed of 1/60 of a second or

faster. If you're shooting a portrait, a still life or a landscape, the shutter speed is not critical. However, if you are photographing racing cars, birds in flight or cheetahs chasing gazelles, those are entirely different circumstances and you will need to re-think your camera settings! Broadly speaking, fast action requires fast shutter speeds. At the other end of the spectrum, many people use deliberately slow shutter speeds to capture blurred movement in a creative way. Such images are typically shot using a tripod to keep the camera steady and you will probably have seen examples of street scenes where the buildings are sharp and the people are a smooth and interesting blur; or a river/sea scene, in which the water is turned into a beautiful smooth texture. These shots are really easy to take and all you need is the patience to do some trial and error exposures to get the shutter speed right for your particular subject.

EXPOSURE COMPENSATION

Quite often, when shooting scenes that include parts of the sky, your camera's exposure meter will be tricked into thinking that there is more light on your subject than there actually is. On very bright days, this can be even more of a problem and without understanding what is happening, you will end up with underexposed images which are dark and lacking in detail. Exposure compensation will rescue this situation and it's a simple concept. If you take a shot looking towards a bright sky and you produce a dark and unrepresentative image, set the exposure compensation to +1 and take the shot again. Then set it to +2 and repeat. Compare the results and delete the poorer shots. Many cameras have exposure compensation that is even more refined, allowing increments of 1/3, so just experiment until you achieve a result which resembles what your eyes have seen. Should you forget which way to turn your exposure compensation control, don't worry, just take a couple of shots in both the + and - directions and see what works.

STYLE

Apart from your own photographic personality and the way you 'see' things, which is unique and subjective, two main issues affect photographic style – depth of field and composition.

DEPTH OF FIELD

Depth of field (DOF) refers to the amount of an image in front of and behind the point of sharp focus, that is acceptably sharp. It is controlled exclusively by the choice of aperture and the wider apertures, eg f2, f2.8 or f4, produce shallow DOF. The narrower the aperture, the greater the DOF. For instance, if you take a photograph of a leaf and you wish the leaf to be sharp and the background to be blurred, you will achieve this by using a shallow DOF. In other words the other things in the image in front of and behind the leaf are out of focus, giving the leaf an appearance of being even sharper. In reality, it isn't sharper at all but because everything else in the image is blurred, it is perceived as being sharper. This is a commonly used portrait technique but whatever the genre, it is highly effective in completely isolating any subject from its background. For best results, you should place some distance between the subject and the background because if both are in virtually the same vertical plane, they will appear uniformly sharp.

Conversely, if you are shooting a subject that requires everything to be as sharp as possible, you need greater depth of field and this is achieved by using a narrow aperture. Understanding and controlling DOF - and therefore precisely how much of every image is sharp - is a key step in creating a specific style of image. Some photographers shoot every image with their lens set to the widest possible aperture to give a sharpness and isolation to their subject, while others, architectural photographers for instance, will shoot every image with their lenses set to the smallest possible aperture, ensuring that everything in the image is sharp, not just the main subject. Obviously, between those two extremes are countless permutations, all waiting to be explored!

COMPOSITION

A good image is a good image, whether or not it conforms to someone else's views on composition, so don't be intimidated by people who tell you that the rules have to be obeyed. Theories and protocols are valuable, helpful and interesting, but some truly great images have been painted and photographed with a total disregard to traditional thinking on the subject of composition!



BOOKING NOW:

INTERMEDIATE COURSE

(4 HOURS, 9am-1pm)
COMPOSITION, AESTHETICS
AND HOW TO TAKE
BEAUTIFUL IMAGES

NIGHT LIGHTS

(3 HOURS, 7pm-10pm)
SIZZLING LIGHT TRAILS,
FLOODLIT BUILDINGS
& RIVER REFLECTIONS

ONE-TO-ONE MASTER CLASSES

HARDCORE TRAINING!
TRANSFORMATION
GUARANTEED!

The Rule of Thirds (or the Golden Ratio) is the most commonly adhered to principle and there are countless examples of the theory being used by, amongst others, Leonardo da Vinci, Rembrandt, Dali – not to mention the builders of Egypt's Great Pyramids! It is certainly worthwhile developing a habit of 'seeing' images subdivided into three equal vertical and horizontal sections, and 'placing' the main point of interest in your image on one of the points of the intersecting lines. In most cases, such a compositional approach will give a far more interesting and satisfying result than simply having every subject of every photography placed in the centre of the frame – but understand and use the theory to suit you – don't become a slave to it. Google 'Rule of

Thirds' and have a look at some of the millions of articles and images, but most importantly, satisfy yourself when it comes to composition – unless you're doing this professionally, the most important thing is to enjoy your photography and that's more important than the opinions of others!

FILE FORMATS

Your camera will allow you to choose the file format and quality for recording your images. There are two main formats to consider - Raw and jpg (pronounced jaypeg). If you intend to do a lot of processing in Photoshop or another imaging program, you may want to choose Raw. Raw files must be processed and then saved into other formats before being printed whereas jpg files can be printed straight from the

camera or memory card. Raw files offer more post-production possibilities but as they are uncompressed, they occupy significant larger amounts of disk space than jpg's. Jpg files are compressed in file size, so they will take up less space on your memory card/hard drive and are pre-sharpened, so your images will appear clearer and sharper. If you opt for jpg files, you will also need to choose a 'quality' setting. This is normally a low, medium or large (or 'fine') choice and if you wish to print your images, you should choose large/fine. The lower options occupy less storage space and are ideal for viewing in mobiles phones and emailing, but are incapable of producing high quality printed results.