SHAW ACADEMY

Lesson 3 Course Notes

Diploma in Photography



Shutter Speeds

The cameras shutter controls the duration that light is entering the camera and exposing the sensor.

The length of time that the shutter is open is known as the **shutter speed**

If we need more light – The shutter will be open for a longer duration

If we need less light the shutter will be open for a shorter duration

Shutter Speeds are measured in seconds and fractions of a second

Shutter Speeds also control how MOTION is captured in our images.

Fast shutter speeds allow us freeze moving objects in our scene as static. Fast shutter speeds do not allow the subject to travel any distance within the shot while the shutter is open, therefore the subject appears as frozen or static in the image. This allows us to capture our subject mid movement/action and create images that contain detail and visual interest that we would not get to experience in normal life as the action would happen too quickly.

Slow shutter speeds allow motion or movement to flow within your image. Slow shutter speeds give the subject time to move within the shot while the shutter is open. This results in the subject appearing as blurred or flowing within the image. Slow shutter speeds create a sense of movement and motion in our photographs which can create a dramatic edge to our images. The length of the time that the shutter is open will determine how much the subject is allowed to blur within the shot.



Apertures

The aperture inside your lens is the cameras secondary mechanism for controlling light coming into the camera. The aperture controls **HOW MUCH** or the volume of light that's coming into the camera. The aperture inside the lens is a hole that can be made bigger or smaller to let in more light or restrict light.

Apertures are expressed as F. Numbers or F Stops Each lens will have a certain range of standard aperture sizes Big Aperture numbers = Small Apertures Small Aperture numbers = Big Apertures

Apertures also control how much of your scene is in focus – Depth of Field.

Physically large apertures (small numbers) give us shallow depth of field. **Shallow depth** of field is when only a small portion of your image is in focus. Usually the main subject is in focus and the rest of the image is out of focus. A common use is in portraits, where the main subject is in focus and the background is out of focus.

Physically small (large numbers) give us a deep/wide depth of field. **Deep/wide depth of field** is where the entire scene is in focus from the foreground to background. A common use of deep/wide depth of field is in landscape images where the photographer wants to show every detail of the landscape from the lake right in front of the camera to the mountains way off in the distance.



