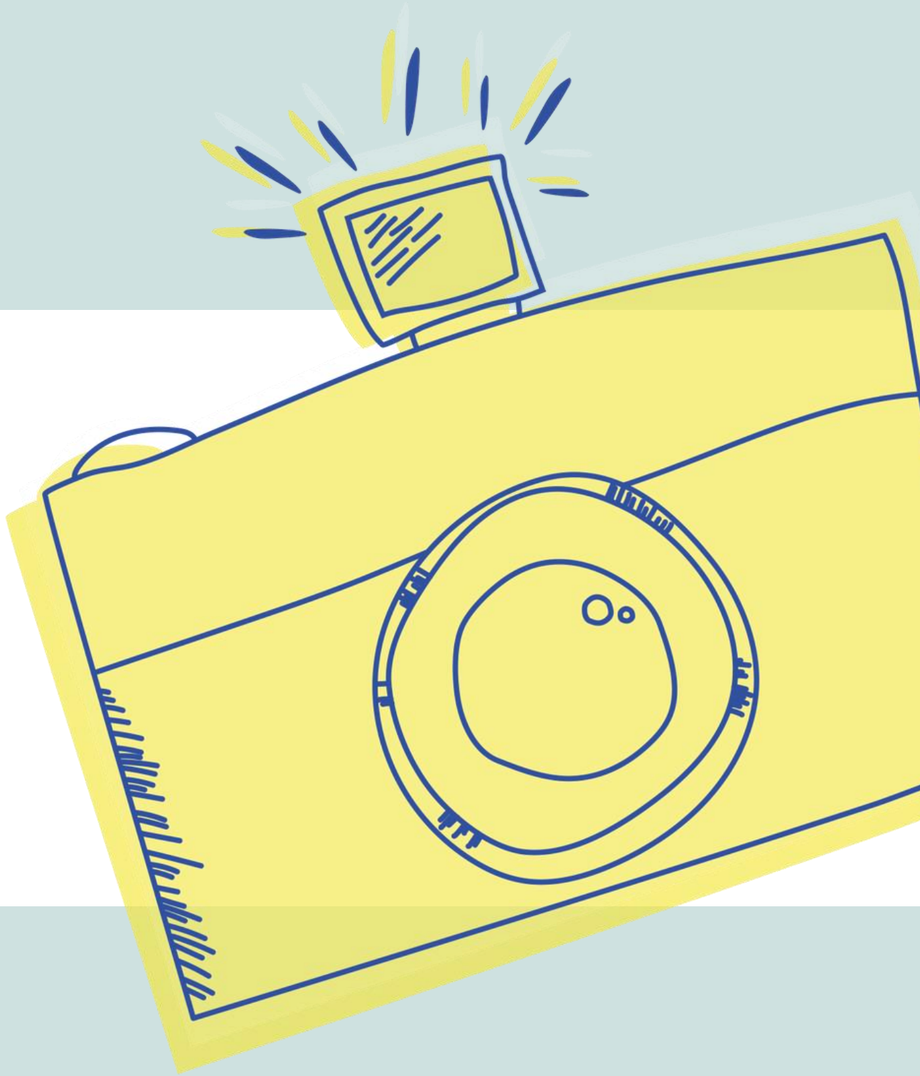
MODULE 4

Exposure



Exposure

ISO

ISO stands for International Organization for Standardization. This term is used to describe your camera's sensitivity to light.

When purchasing film you can choose the film speed or ISO. On digital cameras you can adjust the ISO. The lowest ISO setting on most digital cameras is 100 ISO which has the least sensitivity to light.

Many digital cameras today can go up to 6400 ISO or higher. Higher ISO settings are used in low light situations. The downside of increasing your ISO is that your images will have more "noise" (or artifacts) in the image.

ISO

Let's Take a Closer Look

100 200 400 800 1600+

Lower ISO - Darker

Higher ISO - Brighter

HIGHER ISO

- More sensitive to light
- More noise (artifacts)
- Use indoors, outdoors in the evening and at night

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LOWER ISO

- Sharper images (no noise)
- Less light sensitivity
- Use a lower ISO outdoors on a sunny day.

Exposure

APERTURE

Your camera's aperture controls how much the opening inside the lens opens and closes. By adjusting and managing your aperture using f-stops, you can control the amount of light that enters your camera.

The f-stop is a fraction, so a lower f-stop such as 3.5 (1/3.5) means the opening is wider, while a higher number such as 28 (1/28) means the opening is very small and less light will enter the camera.

APERTURE

Let's Take a Closer Look

f/2.8 f/4 f/5.6 f/8 f/11 f/16 f/22

Higher Aperture

Lower Aperture

HIGHER APERTURE

- Brighter exposures
- Use when in low light or when you want to blur motion

HIGHER APERTURE

- Brighter exposures, more artistic
- Less in focus, narrow depth of field
- Use to achieve a nice blurry background

Exposure

SHUTTER SPEED

Your shutter speed is how long it takes for your camera's shutter to open and close. This affects how much light hits the sensor.

A slow shutter speed lets more light in and is often used in darker scenarios. A fast shutter speed lets less light in and can be used in scenarios where more light is available. Fast shutter speeds should also be used to capture moving objects.

SHUTTER SPEED

Let's Take a Closer Look

1/60 1/125 1/250 1/500 1/1000

Slower

Faster

SLOWER SHUTTER SPEED

- Brighter exposure in low light
- More blur
- Use when in low light or when you want to blur motion

.

FASTER SHUTTER SPEED

- Less blur, sharper images
- Darker exposure in low light
- Use outdoors on sunny days or to reduce motion blur on moving subjects

Let's Review

1

ISO

Your camera sensor's sensitivity to light.

2

APERTURE

Controls how much the shutter opens inside the lens.

3

SHUTTER SPEED

How fast the camera on the shutter opens and closes..