

SO YOU HAVE A CAMERA?

NOW WHAT?



BY
BRIGGS

LESSON 1 : BASICS OF PHOTOGRAPHY

HOW TO HOLD THE BEAST?

The number one most common mistake in photography?

Camera shake, when you move the camera by accident when, you press the shutter! Your images may look completely blurred or they may be a less sharp than they ought to be.

Hold the camera with both hands make sure the horizon is strait when you look through the view finder , or at the display screen (LCD Monitor).

Don't be afraid to rest your camera on something stable, be it a table or wall if you are standing.

If your looking through the view finder, tuck in your elbows, and hold you breath as you take the picture.

Think about where your fingers are? Don't let them stray over the lenes, it may cause smudges.

Keep you lenses clean, get hold of a glass cleaning cloth, to keep you lens, clean and free of dirt which might obstruct the image.

Try and keep you fingers on the sides or underneath the camera to keep its steady.

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**.-l/’ V ‘1 Large Aperture Medium Aperture Small 1% f/8
f**

ASSIGNMENT 1 :

You have 15 min, to take a picture of each of the following.

The colour blue

A smile

Light and shadow

Wind

Reflection

Patterns

Let's see how you did? – put images up on a screen.

What did you find hard or easy about this assignment?

EVER WONDER HOW A CAMERA WORKS?

The word "photography" is French but is based on Greek word and literally means "drawing with light". That's what photography is all about, without light — no photograph. The art of photography is basically seeing and balancing the light.

The illustration to the right shows the path the light travels from the object to the sensor (or film in non-digital cameras).

First the light needs to go through the lens, which is a series of differently shaped pieces of glass. If the focus is good then the light will meet on the sensor.

The aperture is placed inside the lens and is basically an opening that controls how much light reaches the sensor.

On most modern cameras the shutter is placed inside the camera body. This piece of mechanics is what controls how long time the sensor is exposed to the light.

The sensor is a very sensitive plate where the light is absorbed and transformed into pixels. As you can see on this illustration, the image the sensor picks up is actually upside down, just like our eyes see the world, the processor inside the camera then flips it.

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APERTURE? F – WHAT ?



Think of the Aperture as being like the pupil of your eye. If you go into a dark room your pupil becomes really big, to let in more light and help you see in low light. If you shine a torch into your eye, or look at a white piece of paper, your pupil becomes really small, allowing less light in, so you can see without being blinded by the light.

The aperture sits inside the lens and controls how much light passes through the lens and onto the sensor. Much like you need more light in a dark environment. A large aperture lets through very much light and a small aperture very little light. Which exposes the image accordingly. Knowing how the aperture affects the photograph is one of the most important parts of photography.

— it affects the amount of light which reaches the film or sensor in your digital camera.

The depth of field,

The lens speed: how fast or slow your lens closes when you take a picture.

Sharpness - if your image is blurry or sharp (not blurry)

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Bbjeci 8| Light source

We measure aperture in

F-numbers, a mathematical number that expresses the diameter of the aperture. All f-numbers have a common notation, such as $f/5.6$ for an f-number of 5.6.

"standard" full-stop f-number scale is this:

$f/\#$ 1.4 2 2.8 4 5.6 8 11 16 22 32

These are known as full-stop f-numbers. If you decrease the f-number with one full-stop, like $f/4$ to $f/2.8$, the amount of light that passes through will double.

If you increase the f-number with one full-stop, like $f/5.6$ to $f/8$, only half the amount of light will reach the sensor.

A higher f-number = a smaller aperture = less light

A lower f-number = a larger aperture = more light

SHUTTER: WHAT?



Open focal-plane shutter Closed focal-plane shutter

The shutter is what controls how long the sensor is exposed to the light. The longer the shutter is open, the more light can be captured by the sensor.

If you have a fast shutter speed, you can freeze an object while it's moving, say for example a boy running, or a drop of water. You in a sense stop time. However if you have a slow shutter speed, you can capture the motion of an, like running water.

There is a scale of stops for the shutter speeds just like for the aperture, below are the full-stops.

$1/1000 \leq 1/500 \leq 1/250 \leq 1/125 \leq 1/60 \leq 1/30 \leq 1/15 \leq 1/8 \leq 1/4 \leq 1/2 \leq 1 \text{ s}$

The two primary factors which control exposure are shutter speed and aperture. To take a good photo we need to create a balance between the amount of light we let in, F-stop and the amount of time the sensor is exposed. For example if there is little light and we have a fast shutter speed, not enough light gets in and your image is too dark.

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Open focal-plane shutter Closed focal-plane shutter

ISO. WHATS CAMERA FILM ANYWAY?

ISO, back in the dark ages when we still used camera film to take pictures; ISO was the standard measure of film speed, or light sensitivity.

With digital cameras the ISO affects the sensor instead of the film, but the principal is the same. A low ISO speed requires a longer exposure and is referred to as slow, a high ISO speed requires less time to give the same exposure and is therefore referred to as fast. One step in the ISO equals one full-stop, so the ISO is not on a 1/3 scale — film can be found with 1/3 ISO speeds, but it's uncommon in the digital world. These are the most common ISO speeds.

ISO 50 100 200 400 800 1600 3200

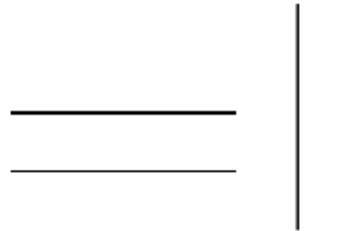
If light is no problem, then always use a low ISO number but if you're indoors with bad light or other conditions when you find the combination of aperture/shutter not to be enough the ISO speed can be a great asset. New digital sensors are constantly developed and the noise levels with high ISO speeds are decreasing with every new release.

MAKING PICTURES? TAKING PICTURES

If you have ever heard, a photographer talk about there work you might have heard them say that they MAKE pictures, every wonder why?

COMPOSITION – RULE OF THIRDS

Or the TIC – TAC – TOE rule, is the most basic composition rule in photography. It means, essentially, that you should imagine lines going through the frame at 1/3 and 2/3 of the way through. This can be horizontally, vertically, or both. Like this:



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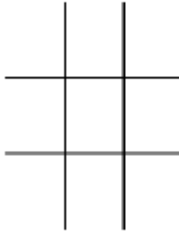
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Rather than putting your subject in the centre of your frame, Compose your pictures with your subject centre positioned at one of the four intersecting points. Or use it to divide your pictures into areas, it's all about balance.

ASSIGNMENT 2 : Take your Camera outside, take 3 images of the same thing, be sure to place your object in a different area in your frame, compare the difference.

ZOOM – ZOOM

Most basic digital cameras have a built-in zoom, get bold use your zoom to focus in on your friend's eye, or nose ! You can use your zoom to give an image different meaning.

ASSIGNMENT 3 : Get someone to pose, for you. Take 5 photos of the person, starting at normal focal range, and zoom in a little each time? Does your photo change in meaning?

FOCUS ? ON WHAT

What you choose to keep in focus, is important in any image. You may want to keep the object in focus or layer over, and image behind with a blurry image in front.

Cheats if you have an automatic camera, you can point the camera at what you want to be in focus, then press the shutter button half way down. Focus then move the frame and press the rest of the way down.

POINT OF VIEW ?

Where you take a photo from is important too, ever wonder what a building looks like from an ant's perspective put your camera on the ground and take a picture ? Think of different angles you take photograph your subject from, which will make your photograph more interesting to the viewer.

ASSIGNMENT 4 : take an ordinary house hold object cup, spoon, egg whatever, think of as many angles you can take a picture of it from? What makes it more or less interesting?

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BUT WHY?

Images are every where, We can almost never get away from them. We can use them, to sell things, to explain ideas, to tell stories. There are many ways, in which photographers make money .

You can create art by using light in creative ways, you can use an image to tell a stories by recreating an event You can use your camera , to record your day, or describe your world to some one else, or to describe how you understand the world and what you find important

ADDITIONAL SIGNMENTS : Take a photo of the following concepts, Be creative – think of unique ways to photograph each item, take more than one photo of each thing, think carefully about subject colour , light, framing, zoom – you have half an hour to Complete this task

Think out of the box:

View from the top
Coffee
Building
Going places
Summer
Enter
Looking out
Wet
Community
Shadows
Home
Motion

WEEKLY ASSIGNMENT: Telling My story, Take you camera with you every where and take pictures of your life. Imagine some one want to write a magazine article on your life. What you find meaningful or important. What you think should be captured. The every day and the ordinary

Perhaps you brushing your teeth, or the view from your window. Think of the techniques we have learned this week and apply them to your photo montage

WEEKLY ASSIGNMENT PART 2: Find 3 images, you like, Think about what makes this photo meaningful? What does it capture? How does it frame the subject, is it from an interesting angle? Think about the composition of the frame

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Think out of the box:

View from the top Coffee Building Going places Summer Enter Looking out Wet Community Shadows Home Motion

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