

Digital II

Course Notes



Direction of Light:

Front Lighting

The most traditional form of photography involves the light source coming from behind the camera lens such as a built in flash. Normally lights many objects evenly and can create decent pictures. Depending on the time of day, this can create harsh shadows squinty eyes and unflattering portraits.

Back Lighting

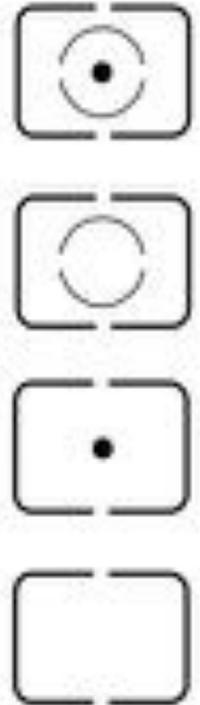
A favourite of portrait photographers, backlighting can be used to emphasize a subject and flatter a subject. Wrinkles tend to be reduced using this method with a well exposed photograph.

Side Lighting

A great option to create shape on a face, object or architectural feature. It can be used most effectively in the early hours of late in the day when the sun is low to dramatically highlight textures in a photograph.

Light Metering:

- Matrix, evaluative, or multi zone metering is the default metering setting for most camera DSLR photographers. In this mode, the camera exposes based on measuring light from the entire photograph.
- Point metering is used when exposure of the subject is the primary concern. The camera measures the amount of light at a specified point. Especially useful for backlit subjects or high contrast situations.
- Center weighted metering measures the light in the center area of the photograph and determines exposure accordingly.



Light Contrast:

Light contrast is an effective tool used together with underexposure (covered below) and can be combined with either front lighting or (for an especially amazing photograph) side light. The result will be the subject beautifully lit with a dark background emphasizing the subject. In the below image, the camera was underexposed by 1.33 stops.

Note: the consistency of the underexposure is best used with evaluative or matrix metering. Spot, partial or centre-weighted metering will provide much more variable results.



Exposure Fine Tuning:

Exposure Compensation or Manual

To change the exposure on a camera in aperture priority (Av or A) you will need to press the +/- button at the same time as dialling the switch that you normally use to change the aperture. In manual, simply adjust the shutter speed to either over or underexpose the image. '+' will overexpose the photo and '-' will underexpose the picture.

Over Exposure / Under Exposure

When overexposing, the subject is exposed properly while the background is slightly overexposed. This is great for portrait photographs when the subject is backlit.

Underexposing a picture is a great method to help bring out colours and clarity in a photograph. In contrast situations, this is a great tool for focusing the viewers eye on the subject.

Hard light:

- A photo taken using hard light is characterized by shadow, where the transition between shadow and light is very clearly defined.
- A very powerful flash taken from the side will often lead to a photo that produces many hard shadows. Photos taken with hard light are often described as "harsh" and can create very powerful images.

Soft Light:

- A photo taken using soft light is characterized by a much softer transition between shadow and light, and often contains very little shadow to begin with. Soft light wraps around the edges of an object, causing many of the natural shadows to diffuse.
- To obtain a soft light effect, a light source should be larger than the object which is being photographed, and/or the light should be diffused (using a reflector, diffuser, light box etc).

Capturing Waterfalls:

In Low Light Situations:

To capture silky waterfall photos in low light situations (i.e. cloudy weather, shadow etc), keep your ISO low and close down your aperture. If you are doing this hand-held, ensure that your shutter speeds are not too slow (1/10th of a second is a good guide but it depends on your lens). If you are doing this on a tripod, aim for at least 1/2 second or slower for the perfect smooth and silky effect.



In Bright Light Situations:

To capture silky waterfall photos in bright light (i.e. direct sunlight), you will need to use the assistance of a Neutral Density filter to cut down the amount of available light.

Action Photography:

The key with action photography is to ensure that you have sufficient shutter speed. Depending on how fast your subject is moving, try to aim for shutter speeds of at least 1/100th of a second.

Remember that with action photography, taking a lot of photos increases your chance of getting the perfect shot. Follow these steps:

1. Increase your ISO and open your aperture to get a fast enough shutter speed. Remember if you are indoors you will need a higher ISO.



Action Photography Cont:

2. Change to AI-SERVO or AF-C so that your camera continually focuses (note: now you cannot lock down focus by half-pressing the shutter).



3. Change your AF Area to either Dynamic AF, or d-9 (for Nikon users), or Automatic AF Selection or d-9 (for Canon users). This allows your camera to choose a point to focus on within a defined area.
4. Change your shutter to continuous (note: continuous high will give you more shots faster than continuous low)



Composition Tips: Sunstars

Sunstars can be used in backlight situations where there are specific light sources such as the sun, reflections or bright lights. Sunstars are a result of light leaking through the aperture blades resulting in a light source with 'arms' coming out. Each lens has a different profile and ability to create the sunstar effect. You may have to experiment with your lens and cover part of the sun using branches, roofs or whatever is handy.

Note: You may need to experiment and most likely underexpose the photograph to get good clean sunstar results.



Composition Tips: Details

- Beginner photographers tend to lean towards taking a photo of the whole of the subject. As your skills develop, you will realize that often the best photographs are the ones that take only part of a subject.
- Look more for the best lighting conditions than the most obvious subject. For example, taking just the details of a column on a building may make a more spectacular photo than taking the entire building.

Look for the beautiful lighting conditions and focus on those details - rather than the whole picture.



Composition Tips: Tilting

- Tilting a photograph at an angle that is more or less 45 degrees off landscape or portrait is a very interesting way to add dynamism and motion to a photograph.
- Remember to tilt your camera very intentionally so that you don't just look like you can't take straight photograph!!



Versus

