



Digital Photography

For beginners

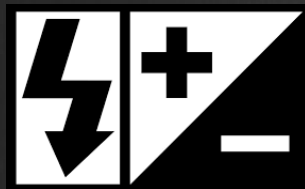
Week 6

In this session:

- ❖ Constructive Critique
- ❖ Using Flash
- ❖ Flash & Exposure Compensation
- ❖ Panning
- ❖ Assignment 6



Critique



Using Flash

Using Flash in Action Photography

When shooting outdoor action shots like mountain biking or skate boarding one great tool to keep in mind as you experiment is your flash.

While an outdoor setting might not conjure images of brightly lit scenes in your mind the flip side of bright sunlight is that you can also end up with fairly dark shadows.

Using a **flash** in these fast moving environments can help you achieve both well exposed images (using both the light of the **flash** to fill out shadows as well as the natural light in the scene) as well as some cool effects if you shoot with slower shutter speeds.

If you have control over the output of your **flash** (some point and shoots and most flash gun units allow this) experiment with a variety of different levels of output.

You probably won't need a full **flash** burst so pull it back a stop or two to get a more natural look.

4 Creative Techniques for Capturing Action with Your Flash

1. Slow Sync Flash

Experiment with **flash** plus a slower shutter speed (slow sync **flash**) for shots that capture the movement of the moment in it's natural ambient light as well as some frozen details and you could end up with some 'wow shots'.

2. Try Panning During Exposure

Combined with slow sync **flash** try panning along with your subject as they move by and you'll capture some interesting effects with blurred backgrounds but an in focus main subject frozen by the flash.

3. Try Zooming During Exposure

Similarly, try zooming your lens in or out during the exposure to get a sense of movement in the shot while still capturing it still during the flash.

4. Experiment with Off Camera Flash

If you want to get really creative try some off camera **flash** techniques to light your subject as they travel by from different angles.



TTL off Camera Flash (SpeedLights)

Things that you should know:

1. That many DSLR-SpeedLight combos are capable of wireless off-camera flash using through-the-lens (TTL) metering without any additional equipment
1. That using off-camera flash can take your photography to an entirely new level both in quality and creative potential.

Many references to off-camera flash talk about sync cords and wireless transmitters, when in fact, many DSLRs with a built-in pop-up flash have the ability to wirelessly control a SpeedLight. Likewise, many hot shoe mounted SpeedLights are fitted with an optical receiver to be wirelessly triggered.

The least painful way to cross the proverbial bridge into the realm of wireless off-camera flash – often referred to as a remote or slave flash – is by utilizing your camera's ability to act as a remote trigger for a flash combined with TTL metering.

The least painful way to cross the proverbial bridge into the realm of wireless off-camera flash – often referred to as a remote or slave flash – is by utilizing your camera's ability to act as a remote trigger for a flash combined with TTL metering.

Most Nikon cameras from the D70, and flashes from the SB-R200 and up; and Canon cameras from the 600D (T3i) and flashes from the SpeedLight 90EX and up offer these features, but check the manufacturer's website to be sure what setups will work. There are also a wide selection of other brands of flash, often less expensive, that offer similar features.

A TTL-equipped flash is manufacturer specific. The TTL feature of a Nikon dedicated flash will only work with Nikon, however, it could possibly still be used in manual mode.

In a nutshell, TTL is the way that the camera sets the exposure and flash intensity automatically by firing a nearly imperceptible pre-flash, taking an exposure reading, and adjusting settings accordingly. Nikon calls it i-TTL and Canon has dubbed it e-TTL but it's basically the same thing.

For wireless off-camera flash functionality, the built-in flash on your camera is set to send an optical signal to your flash which triggers it.

Flash Exposure Compensation

Overall exposure compensation

This is set on the camera body.

For Nikon, this affects BOTH ambient and **flash exposure** for Nikon; (unless changed via a custom function on the newer Nikon cameras like the D4, D800 and D600.)

For Canon cameras, overall **exposure compensation** only affects the the ambient **exposure**.

Exposure compensation is used with the automatic metering modes, however ... with most Nikon cameras, dialling exposure comp in manual **exposure** mode will bias the meter.

With Canon, you can't dial (overall) **exposure compensation** in manual **exposure** mode.

Flash exposure compensation (FEC)

Setting **flash exposure compensation** affects the flash output only. Ambient **exposure** is unaffected.

This can always be set on the flashgun itself, but some cameras have a button on the camera body itself where the flash **compensation** can conveniently be set without taking your eye from the viewfinder.

Flash exposure compensation is used to compensate for the flash output when the **flash** is used in Auto or TTL mode. It obviously can't be set when the **flash** is used in manual output. With manual **flash**, you'd just be dialling the actual power output up or down. With FEC (and TTL **flash**), you are telling the **flash** to give more (or less) **flash** output, relative to what the camera decides via its metering system.



Exposure Compensation

Many new photographers have trouble coming to grips with, is the concept of :

- ❖ Adding **exposure compensation** when the scene / subject is light in tone.
- ❖ Decreasing **exposure compensation** when the scene in front of the lens is darker in tone.

The reason for doing so, is that your camera's meter tries to expose for everything as a middle grey tone.

Hence, if you are using one of the auto modes (or Auto / TTL flash), the camera will expose any light toned scene as if it should be of an average tonality. In other words, the light toned subject / scene will be exposed as middle grey. E.g., someone in a white dress against a white wall, will appear under-exposed. So you need to bump the **exposure compensation** up for lighter toned scenes.

The same reasoning goes for darker toned scenes. A man in a dark suit against a dark brick wall, will have skin tones which over-expose if you left the camera to its own decision. The dark tones would fool the camera's meter.

Scenario

We have a setting where the light is consistent and even. So there will be an exact combination of aperture / shutter speed / ISO settings which will give correct **exposure** for skin tones.

Now, if our subject dresses in all black or all white clothing, our meter reading will change ... yet, the light didn't change. In other words, we would still need the same **exposure**, regardless of the variation in our camera's light meter reading.

If you use an automatic **exposure** mode, then you would have to use **exposure compensation**. And you would have to vary your **exposure compensation** depending on your composition – because the size of the light / dark patches of clothing and background will affect your meter reading.

The same reasoning goes with using Auto or TTL **flash**. You have to continually adjust your **flash exposure compensation**, dependent on the tonality of the scene in front of your lens. This is the reason why I use manual **exposure** mode nearly exclusively.

I often use TTL **flash** (or Auto **flash**) instead of manual flash – the reason is that TTL **flash** is easier to control when I am constantly changing position in relation to my subject. And as I explained earlier, it is easier for me in these situations, to use the camera in manual **exposure** mode, and the **flash** in TTL / Auto mode. But this means that I have to constantly change my **flash exposure compensation**.

Panning

Whenever I see **movement** in a scene, I immediately ask myself whether I want to allow blur of the moving item to show movement, or if I want to freeze the action with a fast shutter speed. I personally believe that many photographers make the mistake of always freezing **motion**. It is certainly easy to freeze the **motion** in a scene with a fast shutter speed, but this technique can become a crutch if it is not used sensibly.

One of the most creative ways to show **movement** is to use a technique called **panning**. The image featured below is an example of **panning**. The bird is in sharp focus, but the background is streaky and blurred. This was accomplished by swinging the camera with the bird as it flew by, and using a slow shutter speed to show **movement** in the background that wasn't moving with the the camera.

When you first start **panning**, you will probably run into a few problems: You will probably only get one or two good shots for every 25 or 30 blurry shots you take. As you practice, you will improve this ratio. Some subjects are more amenable to **panning** than others. A panning shot of someone running will not work well because the arms and head bob will create blur. A bike, a car, or a soaring bird that is not flapping its wings will produce cleaner results.

Generic Panning settings for Beginners

Obviously these settings will depend hugely on the situation and subject, but I want to include a good starting point if you haven't done **panning** before. The shutter speed will vary according to the subject, but 1/20th of a second is a good starting point for cyclists, birds soaring at an average speed, or a car going less than 30 miles per hour.



Shutter Priority Mode

Shutter speed: 1/20th of a second

ISO: 100

Focus Mode: AF-C for Nikon, or AI Servo for Canon

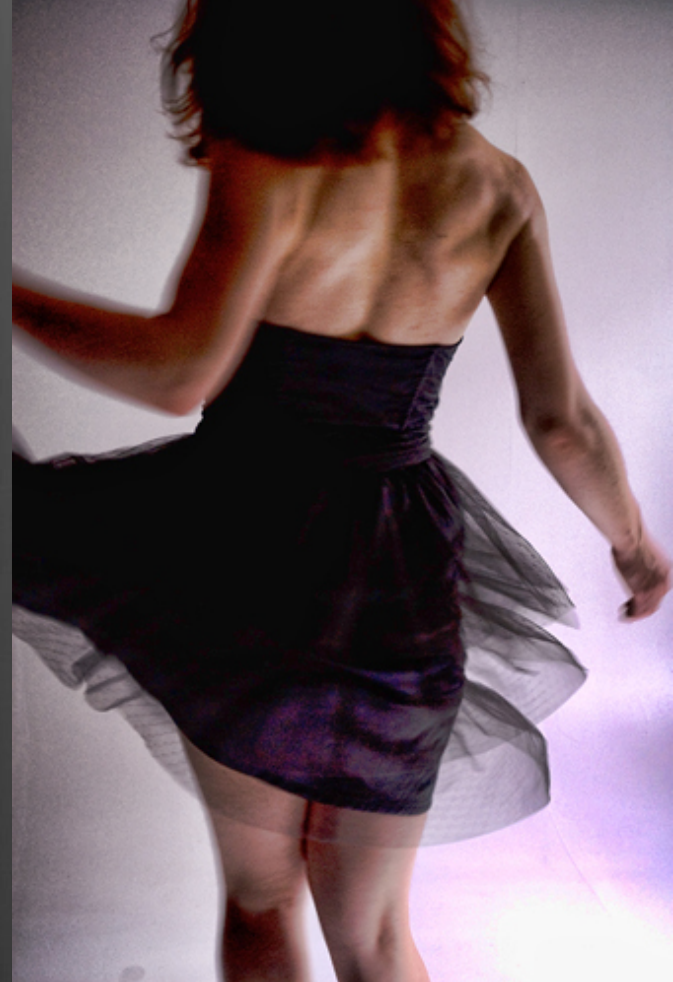
Focal length: 200mm (A long focal length helps the streaking of the background)

Freezing a shot

MPH	Metres per second	1/8000 sec	1/4000 sec	1/2000 sec	1/1000 sec	1/500 sec	1/250 sec
5	2	0.3mm	0.6mm	1.1mm	2.2mm	4.5mm	8.9mm
10	4	0.6mm	1.1mm	2.2mm	4.5mm	8.9mm	17.9mm
25	11	1.4mm	2.8mm	5.6mm	11.2mm	22.4mm	44.7mm
50	22	2.8mm	5.6mm	11.2mm	22.4mm	44.7mm	89.4mm
100	45	5.6mm	11.2mm	22.4mm	44.7mm	89.4mm	178.8mm
150	67	8.4mm	16.8mm	33.5mm	67.1mm	134.1mm	266.2mm

Assignment 6

Motion & Movement



For this assignment you are required to produce 4 images from the 2 techniques below, 2 from each.

1. Blurred Subject With Background In Focus

The shutter speed that you use while photographing a scene plays a key role in capturing motion in your image. The faster the shutter speed, the sharper the focus on your subject. On the other hand, a slower shutter speed will blur a moving object. There are two main approaches (we'll discuss a couple of alternatives in a moment).

Let's assume you're photographing a speeding train against a wall of trees in the background. You can blur the train while leaving the trees in focus. Doing so would instantly communicate to the viewer that the train is moving quickly. To accomplish this, you would use a slow shutter speed. (It's also important to use a tripod. That way, your camera remains steady.) You'll often see this technique used in nighttime photographs with car headlights cutting through the image.



2. Blurred Background With Subject In Focus

This second technique keeps your photograph's subject in sharp focus while the background is blurred. Using our train example, the train would be in focus and the wall of trees would be blurred, thereby conveying the train's movement. Similar to the first method, you need to use a slow shutter speed. However, instead of using a tripod, you'll be panning your camera along the directional path of your subject.



High Speed Flash



Strobe Light Photography

