Although there are many different elements that go into taking a good photo, some important things to keep in mind are focus, exposure, white balance, and framing.

**EXPOSURE**

Exposure is the amount of light that reaches photographic film, as determined by shutter speed, lens aperture, and scene luminance. In digital photography, an electronic image sensor is substituted for photographic film.

**Aperture:** An opening (or hole) that determines how much light enters the camera lens. It is measured in terms of an f-stop value (a ratio between focal length and the diameter of the hole). F-stop refers to the size of the hole. A smaller f-stop value actually means the hole is getting bigger and more light is passing through the lens and reaching the sensor. A bigger f-stop means the hole is getting smaller and less light is passing through the lens. One way to increase exposure is to open up the aperture, which means lowering the f-stop.

**Shutter Speed:** a measurement of time that a camera’s shutter is open when snapping a pic—allowing light, after it has passed through the aperture, to hit the camera’s sensor. The longer the shutter is open (aka the slower the shutter speed), the higher the exposure. However, if the shutter speed is very slow, there may be motion blur in the photo (especially if the subject is moving). So keep that in mind when trying to increase exposure by slowing down the shutter speed.

**ISO**

In traditional film photography, ISO referred to the sensitivity of the film to light. In digital photography, increasing the ISO means digitally increasing the light levels. Increasing ISO is an artificial way to increase exposure. It doesn’t actually increase the amount of light hitting the sensor. However, increased ISOs can result in a less crisp, more grainy image.

**FOCUS**

It can be very frustrating if the subject in your photo is not in focus (aka the subject is outside the plane of focus). The autofocus systems in digital cameras work very well. But sometimes, it can be preferable to manually focus. Rotating the focus ring on the lens will either increase or decrease the distance between the plane of focus and the camera.

*Depth-of-field:* range of distance between the nearest and furthest points from the camera that appear to be in focus.

*Shallow depth-of-field:* A narrow range is in focus in the picture. Often, the background is very blurry and just the foreground is in focus.

*Deep Focus:* A broad range of the picture is in focus. Here, the background and the foreground are both in focus.

A shallow depth of field can be a good way to draw the viewer’s attention to your subject. To make the depth of field more shallow for your photo, you can do two things: (1) **zoom in** (increase focal length) and (2) **open up the aperture** (lower the f-stop value).

**WHITE BALANCE**

Sometimes a picture can appear to have an unpleasant color cast or an unnatural tint. This is because the camera has not taken into account the color of the dominant light in the scene. Often, this can be fixed just by properly **white balancing,** or the process of removing unrealistic color casts so that objects that appear white in person are rendered white in your photo. An indoor scene lit by fluorescent light will have a very different color temperature than sunlight from the outdoors. If you are outdoors on a sunny day, you need to tell the camera that sunlight is the dominant type of light. The process of setting the white balance typically involves taking a picture of something that is a white (usually a card) in your scene. Then, go into the settings of the camera to set the custom white balance to the picture taken.

**FRAMING**

Framing is a very subjective element of photography. One rule of thumb to help you get started is called the “**rule of thirds.**” First, divide the image into thirds with imaginary lines both horizontally and vertically. Now, you’ve created a grid. Create a framing where the subject (or the most interesting part) of the photo is positioned at one of the intersections of the lines. We are visually conditioned to like this type of framing.