

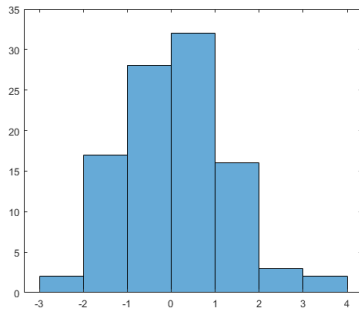
ASSIGNMENT 2

EXPOSURE

Exposure refers to the amount of light that enters a camera and hits the film or digital sensor. The exposure of a photograph is determined by 3 factors – the shutter speed (how long the camera is open), aperture (how big the opening is), and ISO (how sensitive the recording medium is).

If you increase one of these, you must decrease another to maintain an equivalent exposure. And each one has side effects; slow shutter speeds blur subjects in motion, wide apertures (big openings) cause short depths of field (or background blur), and high ISOs (very sensitive film and sensor settings) cause noisier images.

The sports mode on cameras prioritizes a fast shutter, the portrait mode prioritizes a wide aperture, and low light modes prioritize higher ISO values. Understanding how these operate allows you to choose the correct mode or custom settings when you make an exposure.



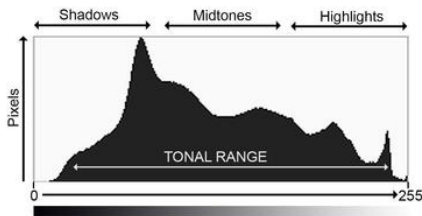
his·to·gram

/'histə, gram/

noun
STATISTICS

1. a diagram consisting of rectangles whose area is proportional to the frequency of a variable and whose width is equal to the class interval.

When you edit photographs on a digital device, histograms are used to show the distributions of exposure values in the images. Using the histogram, you can see if parts of your image are too bright or too dark to be visible. The far left side of our histogram represents absolute black, and the far right edge represents absolute white. Ideally, our entire range of values will fall between these two extremes – so that every part of the image will contain information, rather than being solid black or white.



The darkest values, on the far left, are also referred to as **shadows**. The middle range values are called **midtones** and the brightest parts of the image, shown on the right, are called **highlights**.

Images that have a great deal of separation between their light and dark values, with most of their information gathered at the extremes, are said to be **high contrast** images. When an image is made up of only midtones, it is said to be **low contrast**.

In the following iterations of an image, the contrast decreases moving from left to right.



Increasing contrast involves making highlights brighter and shadows darker – increasing the separation between light and dark values. Decreasing contrast involves making highlights darker and shadows brighter – decreasing the separation between light and dark values.

When editing exposure values with a tonal curve tool (a tool usually only found in more elaborate editors), increasing the slope will increase the contrast of the image. Flattening the curve will cause the image to decrease in contrast.

