

## **Depth of field Assignment**

### **READ THESE INSTRUCTIONS!**

#### Learning outcome(s):

1. Understand how to find out .exif data (shutter speed, aperture, ISO, etc.)
2. Upload images and rename them
3. Understand Depth Of Field
4. Demonstrate your understanding of basic camera controls.

In a very well lit space set up three similar objects approximately one- two feet apart from one another on a table.

Place the camera on the end of the table.

Stagger these objects so that all three are visible when you look into the Viewfinder.

**Focus on the center object. Have the focus point set over your middle object and use the focus ring to focus on this object. A very small green dot will show up in the bottom left of the viewfinder**

#### **If unsure of this consult with your instructor!**

1. Set the aperture ring on your camera to f1.8 or f2. If you have a zoom lens, set it at its widest angle, and lowest aperture number (probably f3.5).
2. Make sure the center object is still in focus and adjust the shutter speed knob so that the light meter indicates proper exposure.
3. Press the shutter release button  
**Do not move closer or further away from the objects. Make sure that the the center object is still in focus; this means not touching the focus ring!**
4. Change the aperture to f8, and adjust the shutter speed so that the light meter indicates proper exposure. Your shutter speed will be slower than before.
5. Press the shutter release.
6. For the third picture you will change the aperture to the largest number you can (f22 or f32) while still getting proper exposure and **not having a shutter speed of less than 1/30 of a second. Hold the camera very steady or use a tripod!!**  
You may wish to try this setup with different objects to make sure that one works!

Download the photos from your SD card to the computer desktop, open the first file in MS Photos, and rename each file to its shutter speed, aperture, and ISO. [This video will help.](#)

After renaming the folder on the desktop, upload it to your OneDrive account.

In your oneDrive account, create an MS Word .docx and insert the 3 images with the exif data below each image.

Hand in your project as a .PDF! Use your name as a title for the file, ie. "JoeBlowDepthofField.pdf"

Your project will be marked on the following:

- The consistency of the lighting (this indicates correct exposure)
- The ability to describe which image has shallow depth of field (D.O.F.), which has moderate D.O.F, and which has deep D.O.F.
- The ability to label each image with its correct aperture and shutter speed
- At the end of the project describe what the relationship between shutter speed and aperture is, and what happens to the aperture/size of the lens opening as the f-number increases

The following is an example of a well-done project, ***do not copy it***, but use your photos and captions to show your understanding of this topic:

Name: Biff McBiffBurger

Block: 9

The photo below has a small aperture # (f3.5 @ 1/125<sup>th</sup> sec.), and therefore XXXXX depth of field.



The next photo has a XXXXX depth of field. (f11 @ 1/30<sup>th</sup> sec.) Note how the background and foreground is in more focus



The last photo has a fairly XXXX depth of field (f22 @ .6 sec). The background and the foreground are now much clearer than before



I noticed that as shutter speed increased, aperture XXXXXX.  
As the f-number increased, the size of the opening XXXXXX.