

Assignment: Basic Camera Use - The Details

The purpose of this assignment is to familiarize you with the basic operations of your SLR style camera. You will use the digital equivalent of a first roll of film to adjust your camera to various aperture, shutter, and exposure combinations.

All exposures should be taken outdoors during daylight hours. Use your camera METER to determine the correct aperture/shutter combinations (exposure) for all shots.

Zoom lens should be set at focal length 35mm for most dSLR cameras (APS-C size).

Full-frame dSLRs should use a focal length of 50mm for this assignment

Micro 4/3 dSLRs should use a focal length of 25mm for this assignment

For Mirrorless Cameras, the sensor size varies by manufacturer, please check your manual

Unless otherwise indicated, your focal point should be an object that is approximately 8-10 feet away from the camera and placed in the center of the frame. All objects should be at eye level, sized between a large stuffed animal and a person, and objects meant to be 'in focus' should be centered in the viewfinder.

The focusing screen on your camera probably has more than 1 focus location indicator (seen as 'squares' through the viewfinder) For this assignment; set the square (usually by moving the command dial on rear of camera) to the center most indicator. It should 'glow red' briefly when the shutter button is depressed halfway and will also usually be indicated on the rear LCD screen. Intended focal point object should completely fill the 'square'.

Review *Chapters 1-3* as needed, Read *Chapter 9: Seeing Like A Camera*

Use dSLR camera at ISO 400 set at RAW+JPG, White Balance set to AUTO

Images may be in BW or Color for this assignment, but BW is preferred

EXPOSURE: 3 Images Due

Use Aperture f8. Meter to determine correct shutter speed.

DO NOT CHANGE YOUR POSITION - IMAGES SHOULD BE EXACTLY THE SAME EXCEPT FOR THE EXPOSURE.

- Create a properly exposed image involving an object in a strange location (out of place).
- Deliberately UNDEREXPOSE the scene and take a 2nd shot. (minimum 2-3 whole-stop shutter speeds faster)
- Deliberately OVEREXPOSE the scene and take a 3rd shot. (minimum 2-3 whole stop shutter speeds slower)

APERTURE ADJUSTMENTS: 2 Images Due (*shoot minimum of 6 sample shots to choose from*)

Meter to determine correct shutter speed.

- With your minimum aperture (big number) - create a scene with at least 3 large objects located at 5, 10 and 15 feet from the camera. Focus on the middle object (the one at 10 feet). All objects should be sharp.
- With your maximum aperture (small number) - create a scene with at least 3 large objects located at 2, 3 and 6 feet from the camera. Focus on the middle object. Only the middle object should be sharp. (If you need to move your object closer than 3 feet, that's ok)

SHUTTER ADJUSTMENTS: 2 Images Due (*shoot minimum of 6 sample shots to choose from*)

Meter to determine correct aperture setting. Only the objects should move – NOT the camera.

- Create an “Unidentified Flying Object” using the principles of blurred motion (slow shutter, generally $\leq 1/125$).
- Freeze an object in midair that symbolizes the life of an MSU student (fast shutter, generally $\geq 1/250$).

Specifications

There will be a separate handout and demo on formatting your assignment on January 30

Timetable

Open Lab –No Class

January 25

You can use this day as a shooting day or come to my office with questions or in-progress examples

Images Due

January 30

Helpful Tips & Things to Remember

- Your camera has an optimum focusing range for objects between 5 –25 feet away
- Think about your position (point of view) in relation to your subject
- Remember to focus your images & use the correct exposure ratio

List of Whole Stop Aperture Settings (from large to small)

2	2.8	4	5.6	8	11	16	22
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List of Whole Stop Shutter Speed Settings (from fast to slow)

1/1000	1/500	1/250	1/125	1/60	1/30	1/15	1/8	1/4	1/2	1
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NOTE: Your camera may have larger/smaller aperture settings or faster/slower shutter speed settings. This is just meant as a representative list.