

Monroe Community College (3 credits)  
PHO 106 Fall 2008 Lecture 381, Lab 385 & 386  
Instructor: Joe Ziolkowski “ Joe Z. “ 20100907

## Assignment #2: “Equivalent Exposure”

### The Moment of Recording to the Final Print.

READ ALL BELOW INFORMATION CAREFULLY BEFORE DOING ASSIGNMENT!



Due: September 28 & 29, 2010

Artist : Joe Ziolkowski, © 2006

Objective:

- **DO NOT USE CN film (C-41 Processing)!**
- Use black and white traditional photographic film, experiment with equivalent exposures, use great and shallow depth of field and fast and slow shutter speed, use at least 1 roll 24 or 36 exposure. You will process the film during lab and print it the following lab.

Assignment Overview:

- Use black and white traditional photographic film to start understanding equivalent exposure.
- This is an assignment to help you to practice equivalent exposure and the use of aperture/depth of field control and shutter speed control with your camera.
- This assignment is meant to bring concepts together with practice.
- The Moment of Recording to the Final Print! There are a lot of steps from camera to print!
- Use of experimentation to create an unexpected and creative photograph.

#### Equipment and Supplies Needed:

- 35mm adjustable camera.
- Use black and white traditional photographic film.
- DO NOT USE CN Black and White CN film, ISO 400 (C-41 processing).
- Photographic paper, towel, film sleeves, scissors, tape.
- Darkroom time for processing and printing film and prints.
- Lab time as needed to process and print film.

#### Procedure:

- Go out and photograph, remember, Photo is Phun!
- Make an overall exposure reading.
- Use equivalent exposures to make Depth of Field adjustments.
- Use equivalent exposures to make Shutter Speed adjustments.
- Write down your settings in your journal.
- Process film & make 2 enlargements.
- Be proud of your accomplishments!

#### Equivalent Exposure Exercise

##### Part I - Depth of Field (DOF)

- Pick or create a brightly lit and interesting scene with depth – object(s) very close to the camera, some farther away and some even farther away.
- Focus on the closest or middle object.
- Set your camera to its WIDEST APERTURE – WHOLE STOPS ONLY.
  - This is your MINIMUM Depth of Field f/stop.
  - WRITE IT DOWN in the Minimum DOF Setting column under f/stop
- Take a meter reading to determine a correct SHUTTER SPEED for your f/stop.
  - Set SHUTTER SPEED to the indicated number.
  - WRITE IT DOWN in the Minimum DOF Setting column under Shutter Speed.
- Take the photo. It should have a very shallow depth of field. You will not be able to see this in the lens.
- Count stops as you adjust your lens to its middle f/stop. Usually f/5.6, f/8, or f/11.
  - WRITE IT DOWN in the Medium DOF Settings column under f/stop.
- Adjust your shutter speed the same number of stops as you counted for the aperture setting. SPEED UP, OPEN UP SLOW DOWN, CLOSE DOWN.
  - WRITE IT DOWN in the Medium DOF Setting column under Shutter Speed.
- Take the photo. Do Not change focus and try to use the exact same composition.
- Finally, count stops as you adjust you lens to its SMALLEST APERTURE –whole stops only
  - WRITE IT DOWN in the Great DOF Settings column under f/stop.
- Adjust your shutter speed the same number of stops as you counted for the aperture setting. OPEN UP, SPEED UP SLOW DOWN, CLOSE DOWN.
  - WRITE IT DOWN in the Great DOF Setting column under Shutter Speed.
- Take the photo. Do Not change focus and try to use the exact same composition.
- That's 3 images per scene - DO NOT CHANGE FOCUS OR COMPOSITION BETWEEN SHOTS!
- Follow the same procedure for at least 3 scenes – three shots each.

## Equivalent Exposure Exercise

### Part II - Motion

- Pick a brightly lit scene that has subjects in motion – things moving like a stream, a road, a sports event, etc.
- Compose your image.
- Set your shutter speed to a fast setting. 1/250 second or faster.
  - WRITE IT DOWN in the Stop Motion Setting column under Shutter Speed.
- Take a meter reading to determine the correct F/STOP for your shutter speed.
  - Set the F/STOP
  - WRITE IT DOWN in the Stop Motion Setting column under f/stop.
- Take the photo. It should stop almost all movement in the scene.
- Count stops as you adjust your shutter speed to a middle setting. – Usually 1/60, or 1/30 of a second.
  - WRITE IT DOWN in the Middle Column of Settings column under Shutter Speed.
- Adjust your f/stop the same number of stops as you counted for the shutter speed. OPEN UP, SPEED UP SLOW DOWN, CLOSE DOWN.
  - WRITE IT DOWN in the Middle Column of Settings column under f/stop.
- Take the photo. Depending on the speed of the subject it may or may not show motion.
- Count stops as you adjust your shutter speed to a slow setting. 1/15 or slower.
  - WRITE IT DOWN in the Show Motion Setting column under Shutter Speed.
- Adjust your f/stop the same number of stops as you counted for the shutter speed. OPEN UP, SPEED UP SLOW DOWN, CLOSE DOWN.
  - WRITE IT DOWN in the Show Motion Setting column under f/stop.
- Take the photo. This will show motion – subject and possibly camera if you don't use a tripod.
- That is 3 images per scene - DO NOT CHANGE FOCUS OR COMPOSITION BETWEEN SHOTS!
- Follow the same procedure for at least 3 scenes – three shots each.
- IF YOU RUN OUT OF f/STOPS or SHUTTER SPEEDS, stop at as extreme equivalent exposure as your equipment will allow.

### Tips for Success

- Use a tripod or some other camera support as needed.

### Submit:

- In your small portfolio enclosed envelope, include the following.
- On your original stationary that has all your contact information.
- An assessment for the assignment.
- A contact sheet.
- At least 2, 8 x 10 inch enlargements illustrating equivalent exposures.
- You do not have to hand in the final negatives.



## Equivalent Exposure for Depth of Field

Name \_\_\_\_\_ Film Type \_\_\_\_\_ Film Speed \_\_\_\_\_

Minimum DOF

Settings

f/stop shutter speed

Medium DOF

Settings

f/stop shutter speed

Great DOF

Settings

f/stop shutter speed

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

## Equivalent Exposure for Stop Action

Stop Action

Settings

f/stop shutter speed

Medium Speed

Settings

f/stop shutter speed

Show Motion

Settings

f/stop shutter speed

7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_

Aperture:    f/1.4   f/2    f/2.8   f/4    f/5.6   f/8    f/11   f/16   f/22   f/32  
 Shutter Speed: 1/2 “   1/4 “   1/8 “   1/15”   1/30”   1/60”   1/125”   1/250”   1/500”   1/1000”