

PHOTO Exercise 1: " LIGHTING RATIO AWARENESS "

This project is designed to make you aware of lighting ratios and to begin to be able to “see” the effects of various ratios on a subject. To make it easier, you may use each other as subjects. The more you actually see the change and consider it, the sooner your eyes will develop the ability to recognize appropriate ratios when you see them.

Subject

- (1) A person sitting in a chair or on a stool. Or you could use...
- (2) A solid non-reflective item (such as a stuffed toy or even a mid-sized ball (football or basketball sized). Either subject should have a base tone somewhere around middle gray or a bit lighter. You will have to use your camera in full manual mode for this assignment. Do not use any programmed mode.

Materials/Needs

- 1.) 2 light sources or instruments .
- 2.) Your Subject.
- 3.) 1 roll of 35mm film or equivalent medium format or digital images (approximately 25 shots).
- 4.) This handout and chart

Procedure

(Use the chart on the back for a guide and record for your shooting.) Place the person or object close to **main** or **key** light source with the light source off to the side so that there are strong but not specular highlights on the lighted side and deep shadows on the opposite side. **That means there should not be anything close to the shadow side that is light and reflecting back on the subject.**

Start with **NO fill** from the second light instrument on the subject. Take an exposure reading on the lighted side of the face or object. Also read and note the shadow side of the face. Note the difference in stops. Ideally, unless there is a lot of light reflection in your shooting space there will be three or more stops difference between the sides. Whatever it is, write it down and also write down the DIFFERENCE in ‘stops’ of exposure from the readings of highlight and shadow if it is more than 3 stops.

OPEN UP one (1) f-stop from the indicated exposure reading. Make sure that the shutter speed is not more than 1/8 second or less than 1/500. (If using strobes you cannot use a shutter speed faster than your sync speed.) Make an exposure. You will now make 5 more exposures, **opening up** the aperture one half (1/2) stop for each exposure until your last shot is 1 F-stop UP (more light) from the indicated reading. This is the first “set” of shots on the chart.

Then, Move the second (“**fill**”) light into place, close to the camera axis but on the other side from the main light. Move it in to where you can just start to see its effect then position it at a distance to give you a 2 stop difference between the main light and this fill light. Read the lighted side of the face. (If no light spills it will be the same, but some may bounce back from the wall or window.) Then repeat the five-shot sequence bracketing from one stop overexposed to one stop underexposed.

Move the fill light slightly closer and repeat based on the chart on the back. For the last sequence, the main side and the fill side are almost identical with only a ½ stop difference in exposure readings. The whole process should take at least five steps creating 25 shots.

Process or have the film processed normally. If digital shoot JPEG or do not adjust for exposure or contrast before making your index prints. If you are shooting with digital, start paying attention to the histogram. Make a note on the chart if the histogram bars go off of one side or both at a particular setting.

To Turn-in

On Blackboard submit

1. Contact or index sheet with appropriate references based on the chart below. (You can number the images based on the chart list, i.e. “namelightingratios 1.jpg” through “namelightingratios 24.jpg”
2. This is a technical exercise to start you seeing how to determine ratios as well as how to see them in front of you. Therefore you will only be graded on the technical aspects of it including following directions.

Lighting Techniques: Lighting Ratios Assignment 1

All shots are made with one (first set) or two (remaining sets) lighting instruments. Make sure that wherever you shoot, little or no light is being reflected back from walls opposite the lights and that the only light filling the shadows is from your fill light.

#	Lighting/fill	Exposure Description	Meter Reading
1	No fill- 3+ stops	1-stop over indicated exposure	F @ 1/
2	No fill	½-stop over indicated exposure	F @ 1/
3	No fill	Indicated Exposure	F @ 1/
4	No fill	½ stop under indicated exposure	F @ 1/
5	No fill	1 Stop under indicated exposure	F @ 1/
6	¼ Fill- 2 Stops	1-stop over indicated exposure	F @ 1/
7	¼ Fill	½-stop over indicated exposure	F @ 1/
8	¼ Fill	Indicated Exposure	F @ 1/
9	¼ Fill	½ stop under indicated exposure	F @ 1/
10	¼ Fill	1 Stop under indicated exposure	F @ 1/
11	½ Fill- 1.5 stop	1-stop over indicated exposure	F @ 1/
12	½ Fill	½-stop over indicated exposure	F @ 1/
13	½ Fill	Indicated Exposure	F @ 1/
14	½ Fill	½ stop under indicated exposure	F @ 1/
15	½ Fill	1 Stop under indicated exposure	F @ 1/
16	¾ Fill- 1 stop)	1-stop over indicated exposure	F @ 1/
17	¾ Fill	½-stop over indicated exposure	F @ 1/
18	¾ Fill	Indicated Exposure	F @ 1/
19	¾ Fill	½ stop under indicated exposure	F @ 1/
20	¾ Fill	1 Stop under indicated exposure	F @ 1/
21	Full Fill- .5 Stop	1-stop over indicated exposure	F @ 1/
22	Full Fill	½-stop over indicated exposure	F @ 1/
23	Full Fill	Indicated Exposure	F @ 1/
24	Full Fill	½ stop under indicated exposure	F @ 1/