

T436 Week 5 Camera Filter Exercise

Your name _____

Your partners: _____

Objectives: Become familiar using a light meter, matte box, and filters with the Sony Z7U.

This exercise is worth 15 points broken down as follows: (Questions on this worksheet and critique paper (individually graded): 8 pts, production and edited Quicktime file (group grade): 7 pts.

You'll need a gray card, light meter, Sony Z7U, matte box and filters.

NOTE: You can team up to carry out this project and share an edited Quicktime file. However each group member will have to fill out his or her own assignment, review the recorded footage, and write his or her own critique.

Matte box notes: Do not transport the camera with the matte box attached. This will stress the support rods. They are only designed to hold the sunshade. Before using filters:

- Wash your hands!
- Make sure you know where the two filter tray holder locking screw knobs are located. Loosen one and pull out a filter tray holder. Note the pullout knob that holds the glass filter in place. Do not confuse the two.
- Handle filters only by the edges.
- If it's necessary to clean a filter, do so only with optic cloth.

As a group, take turns doing the following.

- Attach the matte box base to the camera. Securely mount on tripod
- Attach support rods to base
- Attach sunshade/filter holder assemble to support rods
- Attach eyebrow to sunshade

Follow the instructions below and then capture and review the required shots. You'll need to convert your footage into an Apple ProRes HQ 1080i HQ Quicktime file. **Please slate the edited sequence with all of your group members' names.** Place the Quicktime file in the T436 dropbox and turn in your typed critique stapled to this assignment by the start of next week's lab time.

For the critique: Examine the footage you shot. Write a 2-page critique describing your thoughts, observations and success (or lack of) with the various sections.

Section 1 - Camera rating - Turn the Sony Z7U on and clear all of the controls. Make sure:

- You're using the proper WB preset for your location (e.g. indoor)
- Your shutter is set to 60 (You'll see "60" on the LCD screen)
- Your gain is set to 0 (You'll see 0dB on the LCD screen)
- There are no ND filters in place (The round filter wheel should be on filter #1)
- Your iris is set to manual (The control is on the lens)

Evenly & brightly illuminate a gray card. **NOTE: You'll have to brightly illuminate the gray card for this exercise to work!**

Zoom in and fill the entire screen with grey.

Press the momentary "Push Auto" button on the lens a few times to toggle it into auto iris mode. What f-stop does the camera choose? _____

Take your light meter and make sure it's set to 30 f/s (or 1/60th of a second). Take a few readings of the gray card. Dial the ISO on the light meter until the f-stop matches what you recorded for the camera.

What ISO reading? _____. This is the "rating" or ISO speed of the camera.

Section 2 - Built-in ND filters - Dial in the ND2 filter. You'll see ND2 1/4 on the LCD screen. Press the momentary "Push Auto" button on the lens a few times to toggle it into auto iris mode. What f-stop does the camera choose? _____

Dial in the ND3 filter. You'll see ND2 1/16 on the LCD screen. Press the momentary "Push Auto" button on the lens a few times to toggle it into auto iris mode. What f-stop does the camera choose? _____

How many f-stops did the ND2 filter take off? _____

How many f-stops did the ND3 filter take off? _____

Brownie points: How many stops does the ND4 filter take off? _____

Section 3 - Matte Box & ND filters - Keep your camera pointing to the brightly lit gray card. Reset your ND filter wheel to ND1 (clear). Record 30 seconds of color bars.

You'll need at least 2 different ND filters for this section. Take out an ND filter.

What is the ND filter number? (Tiny print on the edge of the filter) _____.

Insert the 1st ND filter into the matte box. Press the momentary "Push Auto" button on the lens a few times to toggle it into auto iris mode. What f-stop does the camera choose for the gray card? _____

How many f-stops did it take off? _____

Insert the other ND filter. What is its ND filter number? _____

Insert the 2nd ND filter into the matte box. Press the momentary “Push Auto” button on the lens a few times to toggle it into auto iris mode. What f-stop does the camera choose for the gray card? _____

How many f-stops did it take off? _____

Section 3- enhancing filters - Find a nice location and create a nicely lit and composed medium close-up of one of your partners. Make sure it’s properly exposed. Try to achieve a shallow DOF- so the background is out of focus.

Shoot at least 10 seconds while you provide some audio narration: (Tell us your name and note the fact that you aren’t using any filters.)

Do not move your camera or the talent and carefully insert an enhancing filter.

Write down your selection. Filter #1 _____

Shoot at least 15 seconds while you provide more audio narration: Tell us what filter you are using.

Now choose another filter and note your selection. Filter #2 _____

Shoot at least 15 seconds while you provide more audio narration: Tell us what the second filter is that you’re using.

Choose a third filter and repeat the shots and audible slate. Filter #3 _____

Section 4 - Polarizing filter - Setup a shot with a visible reflection. (E.g. partner through a window or through a car windshield). Record at least 10 seconds of the shot without the filter, followed by at least 10 seconds of the same shot with the filter. Be sure to record an audible slate while taping.

Section 5 - SFX or Gradient ND filter - Setup a shot that will benefit from either an SFX filter (E.g. star filter) or a the Gradient ND filter. Write down your selection.

Filter: _____

Record at least 10 seconds of the shot without the filter, followed by at least 10 seconds of the same shot with the filter. Be sure to record an audible slate while taping.