lighting 201 in the studio

Joe Klocek, Instructor

The Photography Cheat Sheets

- Specific settings to plug and play
- Simple directions
- Link to instructional video
- 31 cards on all variety of topics
- The best tool to use in conjunction with classes and instruction



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Landscape (handheld)

- Aperture set to f/8 or f/11
- Shutter speed set between 1/125 and 1/250
- Set ISO to auto (manual mode with auto ISO)
- Focus mode set to AF-S
- Focus area set to single focus point
- White balance set to daylight or cloudy day, depending on conditions
- Evaluative metering mode

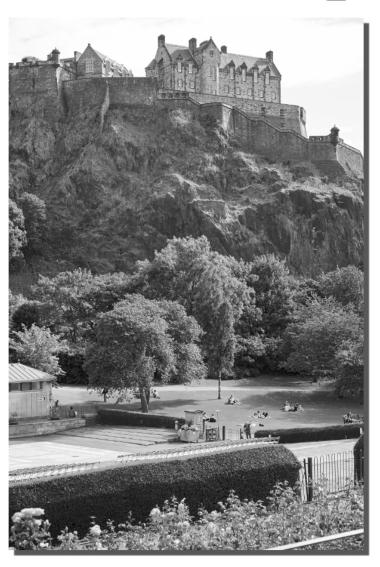




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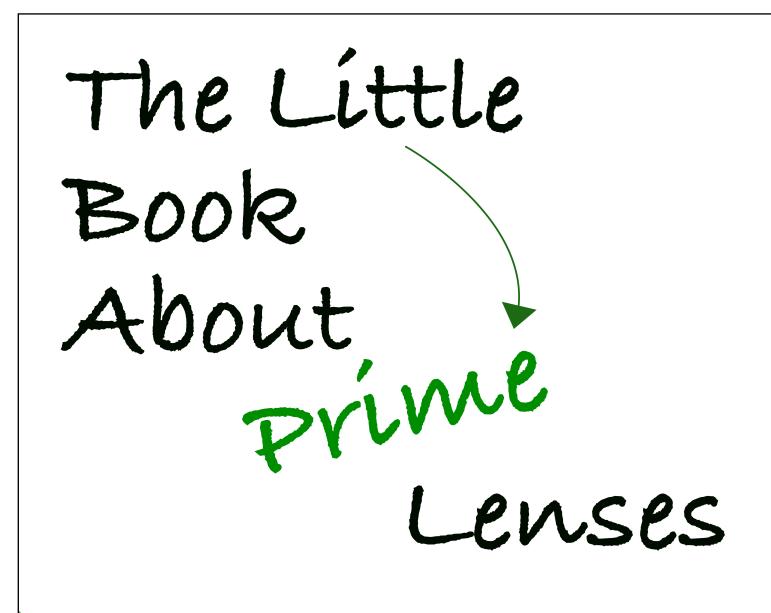


Directions

Navigate focus crosshair over the subject and acquire focus before shooting. Check that there is no motion blur captured in the frame. You can improve many compositions by placing an interesting object close to the camera. Try to shoot at advantageous times of day, such as sunrise and sunset, to get the best shadows and color. In order to achieve both the appropriate aperture and a fast enough shutter speed to hand-hold the image, use the RAW exposure technique and don't be afraid to raise the ISO if needed.

The Little Book About Prime Lenses

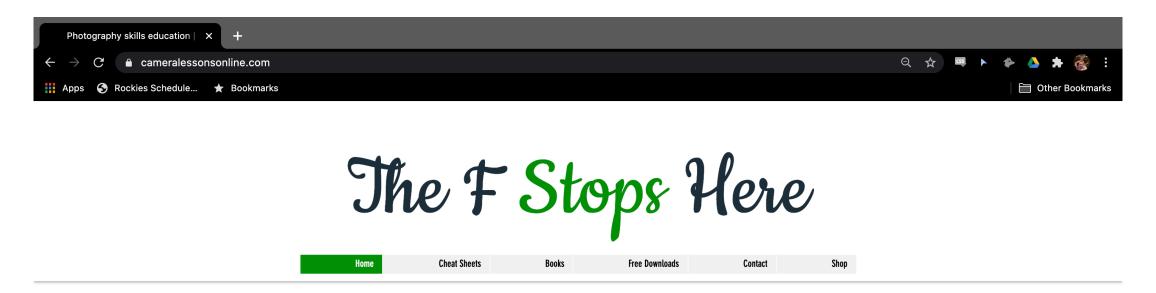
- Understanding angle of view
- Perspective and perspective distortion
- Chromatic aberration
- Common usages for common focal lengths
- Aperture varieties



shoot anything

This lecture is available as a PDF

www.TheFStopsHere.org



Photography Cheat Sheets



The Photography Cheat Sheets are the closest thing to having a photography instructor with you as you can get. This set of 31 cards covers every variety of photographic endeavor a hobby photographer is likely to encounter and gives specific settings to use, simple instructions, and links to short video instruction. They are available exclusively through Mike's Camera.

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* ambient exposure

the black frame

* watt seconds

* key light placement

* fill light placement

* hair light placement

high key

low key



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In lighting 101 we discussed setting an exposure in the camera in manual and adding the light on top of that.

refresher refresher

The * Stops

How bright is the ambient exposure? Our flash must be at least that bright, on our subject, for it to register in the photograph.

Here. Iuminosity

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First, turn off your strobe. Your goal here will be to figure out what you want the ambient exposure to look like within the frame.

Sony A7 Sony 24-70mm f/4

70mm

1/125

F4



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Set the ambient exposure using shutter speed predominantly, and ISO and aperture secondarily. I find it easier to stay at or under your sync speed.

Sony A7 Sony 24-70mm f/4 70mm 1/200

F8 ISO 100

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Then turn on your strobe and light the subject. The greater the difference between ambient and strobe exposure, the greater the drama in the shot.

Sony A7
Sony 24-70mm f/4
70mm
1/200

F8 ISO 100

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What we are doing outside is mixing our studio light into the ambient environment, but what if we want to move inside? What kind of benefits can we expect?

Sony A7Riii

Sony 55mm f/1.8

55mm

1/200

F8



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First, we can control all direction, luminosity, and specularity of the light.

Not only that, but we have a single white balance to worry about.

Sony A7Riii

Zeiss 85mm f/1.8

85mm

1/200

F8



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When we step into a studio the first thing we should do is find an exposure which provides a black frame when the strobes do not fire.

Sony A7Riv Sony 70-200 f/2.8

165mm

1/160

F9



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When we have this and add light back in, all light within the frame is controlled, and so it is a single white balance and all of its attributes are adjustable (unlike ambient light).

Sony A7Riv Sony 70-200 f/2.8

165mm

1/181

F9



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But to work in this environment we need to understand something about how bright our lights are.

Sony A7Riii Zeiss 85mm f/1.8

85mm

1/200

F8





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Watt seconds

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Describes how much power is used, but not its efficiency, because of this it is inconsistent.

Sony A7 Sony 70-200 f/4 135mm

1/200

F8



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That said, we can use it to gain a basic understanding of how bright our lights might be at full power.

Sony A7Riv Sony 135mm f/1.8 135mm 1/200 f/5.6



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For instance, if a black frame appears at f/5.6, then we need our lights to fire at at minimum f/5.6 (but probably brighter).

Sony A7Riv
Zeiss 85mm f/1.8
85mm
1/160

f/11 ISO 100



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Within a shot, an individual light will always be described as an aperture at a distance.

Sony A7 Sony 55mm f/1.8 55mm 1/200

> F8 ISO 100



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After all, we start in the studio at ISO 100 and our shutter speed starts at the edge of sync speed.

Sony A7Riii

Zeiss 85mm f/1.8

85mm

1/250

f/11



The stops
Here.

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Therefore we cannot really change either factor to control exposure (more on shutter later). So aperture is the mechanism we have to describe a light's brightness.

Sony A7Riii
Zeiss 85mm f/1.8
85mm
1/200

f/8 ISO 100



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The last thing to mention is the inverse square law, which says that as the distance from a subject to a light doubles, the brightness from the light drops to 1/4 it's original brightness.

Sony A7Riv

Sony 135mm f/1.8

135mm

1/160

f/11





live demonstration