

### Key Learnings #4 – Unit 2 – Exposure

#### CREATIVE EXPOSURE CONTROL

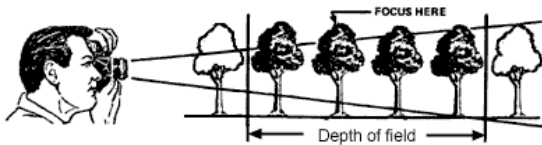
Although there is something to be said about striving for “Technically Correct” exposures, developing your Photographer’s Eye and making *creative exposures* will help you achieve your best images.

You have learned about the light-controlling camera features: **ISO**, **Aperture** and **Shutter Speed** controls. These three work in tandem and you adjust them accordingly to gain more *creativity* in your exposures.

**Composition** is the first creative element of your Photographer’s Eye. Next, we turn to **DEPTH-OF-FIELD**, controlled by *Aperture*, and **CAPTURING TIME and MOTION**, controlled by *Shutter Speed*.

#### DEPTH-OF-FIELD via Aperture Control

Depth-of-field is defined as *amount of space in front of and behind the subject of your photograph that appears in focus*. It’s the area that appears acceptably sharp in your image.



#### Controlling Your Depth-of-Field (DOF)

1. ↓ Aperture Size = ↑ DOF (remember: ↓ Aperture Size = ↑ f-stop number)
2. ↑ Distance = ↑ DOF
3. ↓ Focal Length of Lens (eg; 18mm wide-angle lens) = ↑ DOF
4. ↑ Focal Length of Lens (eg; 100mm telephoto lens) = ↓ DOF




#### CAPTURING TIME/MOTION via Shutter Speed

Depending on the activity you are photographing, you need to decide whether you want to **freeze** the action, or **blur** it. Freezing the action may dramatize it, but may be inappropriate. Blurring the action can accentuate it, or used to emphasize motion.

**Use “fast” shutter speeds to freeze motion. Use “slow” shutter speeds to blur it.**

#### EQUIVALENT EXPOSURES

Due to the **reciprocal nature** of Shutter Speed and Aperture, **at any given ISO**, you need to *adjust the Shutter Speed accordingly* if you make an Aperture adjustment for your creative efforts involving Depth-of-Field. Similarly, if you make Shutter Speed adjustments to flex your creativity muscle in the area of Capturing Motion, you will need to *adjust the Aperture accordingly*.

Aperture Size	f-stop	Shutter Speed
	f/2.8	1/4000
↓	f/4	1/2000
	f/5.6	1/1000
↓	f/8	1/500
	f/11	1/250
↓	f/16	1/125
↓	f/22	1/60

**As f-stop ↑ (less light), Shutter Speed ↓ (more light)**  
**As f-stop ↓ (more light), Shutter Speed ↑ (less light)**

## NOTES

Aperture Exposure Triangle Shutter Speed

Exposure Triangle

ISO

### For SHALLOW Depth-of-Field

- Use a **LARGE** aperture (eg f/2.8).
- Move **CLOSER** to your subject
- **ZOOM IN** and use a **LONGER** focal length