FILM NOTES

HOW TO USE:

This edition of FILM NOTES is printable and can be used as a companion to the mobile edition. We recommend printing this edition so you can fill out the worksheets as you follow along on your FILM NOTES mobile edition. Feel free to print additional copies of the blank film worksheets included toward the end as needed.

ADDITIONAL RESOURCES:

Film Photography 101:
http://erickimphotography.com/blog/film/

Film Photography Tips:
http://erickimphotography.com/blog/2017/05/20/film-photography-tips-by-eric-kim/

HAPTIC

Printable Edition, 2018

Written by Eric Kim

Edited by Cindy Nguyen

This FILM NOTES belongs to	
If lost, please return to	
My film photography journey	
Start Date	
Location	

WHY SHOOT FILM?

In an age of constantly being 'plugged in' to devices and social media, shooting film helps us disconnect. This gives us more time to reflect on meaningful life moments, and to appreciate our loved ones and the world around us.

Shooting film will not make you a better photographer, but it will make you more contemplative and appreciative of the process of photography. The principles you learn from shooting film can be applied to digital photography such as conceptualizing a frame and not looking at your LCD.

FILM NOTES will lay out the basics for anyone interested in trying out film photography for the first time. Above all, I want this process to be fun and enjoyable to you. Film photography is a lot less complicated than it may seem. Now let us dust off those old film cameras and get started.

Eric
Saigon, 2018

MY MISSION STATEMENT

Why do I make photos?

What subject matter do I like to photograph?

What inspires me?

My personal photography goals:

FILM NOTES

1. Getting Started

2. Exposure
   → Worksheet: Understanding exposure
   → Analysis: Are my photos properly exposed?

3. What do I want to photograph?

4. Pre-Focusing
   → Worksheet: Pre-focusing in street photography
   → Analysis: Are my photos in-focus?

5. Pushing Film
   → Worksheet: Shooting with pushed film
   → Analysis: Results of pushed film

6. Developing & Scanning

7. Archiving & Storage

8. Film Photography Assignments

9. Blank Film Photography Worksheets

10. Reflections on Film Photography: Beauty in Imperfection

1. GETTING STARTED

To start off, you need a film camera.

If you have never shot film photography before, do not run out and buy an expensive film Leica. Instead, find the most affordable film camera available. Ask your family or friends for their old film cameras. Someone probably has at least one old film camera collecting dust in a closet.

If you do not have access to any free film cameras, I recommend starting with a cheap film SLR. Canon AE1's, Nikon FM-series cameras, or any point-and-shoot film camera are cheap to find on the secondhand market such as eBay, Craigslist, or Amazon.

For street photography, the best "bang-for-the-buck" compact camera is the Contax T2– a superbly built film camera with a 38mm f/2.8 lens, and the ability to pre-focus at certain distances, or you can use it with auto-focus.

If you happen to have a more flexible budget, a good film rangefinder starter kit is the film Leica M6 and the Voigtlander 35mm f/2.5 lens. Contact my friend Bellamy Hunt at JapanCameraHunter.com to help you find one.

You also need to buy some film. For black and white, I recommend Kodak Tri-X 400 because it is classic, is contrasty, and has appealing grain. For color, I recommend Kodak Portra 400, which renders skin tones beautifully.

If you are on a budget, I recommend Kodak Gold or any cheap Fujifilm color film. Buy your film online at bhphotovideo.com or on Amazon.com. If you live outside of the United States, I recommend my friend Vishal who runs CameraFilmPhoto.com.

REFLECTIONS	
Why do I want to shoot film? *Is shooting film an artistic experiment or a long term investment for me?* *My budget:*	
Film Camera + Lens (Option 1):	
Pros:	Cons:
Film Camera + Lens (Option 2):	
Pros:	Cons:
Film Camera + Lens (Option 3):	
Pros:	Cons:

2. EXPOSURE

The common mistake most beginner film photographers make is under-exposing their photos (having their photos too dark).

In film photography, it is better to over-expose your photos (make them brighter) than to under-expose your photos. The reason is that if your film photos are too dark, you cannot recover any details from the shadows. If you over-expose your film, it is easy to 'recover the highlights' of your photos in Photoshop or Lightroom.

In digital photography, it is opposite: It is better to under-expose your photos than to over-expose your photos.

If you are starting off in film photography, I recommend sticking with the same type of film for a few months. The benefit of sticking with one type of film is that you will be able to keep your ISO consistent, and learn exposure by adjusting your shutter-speed and aperture. You will also discover how your film photos look under different lighting situations.

If you do not know how to manually-expose your photos, I recommend downloading a free smartphone 'Light Meter' app, or picking up a hand-held Sekonic L-308S-U Light Meter.

→ *Assignment 2: Understanding Exposure*

Worksheet Part 1: Track your aperture, shutter speed, and light conditions while shooting.
Worksheet Part 2: Analyze your scans to see if your photos are properly exposed.

QUICK SETTINGS

If you are shooting indoors, always shoot wide-open (at f/2-2.8, or whatever your maximum f-stop is) to prevent having under-exposed photos. If you are shooting ISO 400 film indoors at f/2.8, use a shutter speed of 1/30th or 1/15th to get a correct exposure. Hold your camera steady when you are shooting in low-light to avoid blur.

When you are shooting outdoors, keep your aperture at f/8, and adjust your shutter speed. On a bright sunny day (ISO 400), use f/8, and 1/1000th shutter speed to get the correct exposure. If you are shooting in the shade (outdoors), shoot at f/8, with 1/60th shutter speed.

GUIDE

IF YOUR PHOTOS ARE TOO DARK,	
Use higher ISO film	Instead of ISO 400 film, use ISO 800 film
Lower F-stop	Change aperture from f/8 → f/2.8
Reduce shutter speed	Change shutter speed from 1/500th → 1/125th

IF YOUR PHOTOS ARE TOO BRIGHT,	
Use lower ISO film	Instead of ISO 400 film, use ISO 200 film
Increase F-stop	Change aperture from f/2.8 → f/8
Increase shutter speed	Change shutter speed from 1/125th → 1/500th

Assignment 2: Understanding Exposure *(Part 1/2)*

- Stick to one camera, one lens, and no lens filter
- Use 35mm ISO 400 film
- Shoot fully-manual (do not use aperture-priority mode)
- Practice shooting in different lighting and locations
- Describe light conditions: sunny, cloudy, shady, indoors

Camera & Lens:	Film & ISO:
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Content Summary:	

#	F-stop	Shutter Speed	Light Conditions	Notes
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Analysis 2: Are my photos properly exposed? *(Part 2/2)*	
Have a lab develop and scan your film. Afterwards examine each frame to learn from your successes and mistakes with exposure.	Exposure - under-exposed 0 just right + over-exposed

Camera & Lens:	Film & ISO:
Start: / /	End: / /
Processed: / /	Lab:
Scanned: / /	Archived: / /

#	In focus?	Exposure	♥	Notes
	Y/N	- 0 +	Y/N	
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3. WHAT DO I WANT TO PHOTOGRAPH?

To start, take your film camera (and digital camera as a backup) for a walk, and photograph whatever interests you. Start off by photographing objects like telephone poles, buildings, and urban landscapes. Also photograph your friends, loved ones, and family.

The good thing about shooting film is that anything you take a photo of will automatically be labeled as more "artsy". I hate to say it - but it is true. Photos of urban landscapes or random stuff you find on the ground seem more intentional and contemplative when shot on film. Why? Because in this digital age, if you find a scene so interesting and are willing to spend the cost of film to capture that moment, it shows more 'intentionality.'

How does the 'medium' of film affect the 'message' of the photograph? Rather than debate if film photography is better, think about what you like to photograph, why you shoot film, and what message you want to convey.

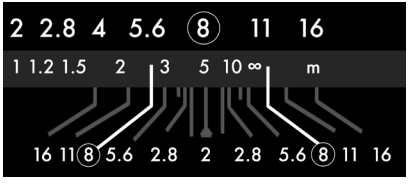
REFLECTIONS
What do I like to photograph? *How does shooting film change my shooting style or subject matter?*
Film Photography Project Idea 1:
Film Photography Project Idea 2:
Film Photography Project Idea 3:

4. PRE-FOCUSING

If you plan on photographing moving subjects or street photos on film, pre-focusing can help you capture "the decisive moment" by not wasting time on focusing.

Pre-focusing is a technique where you pre-focus your lens to a certain distance *before* you take a photo. For example, a good default focusing distance is 1.2 meters (roughly two-arm-lengths away).

Example: Shooting Outdoors at f/8
If you are shooting with a 35mm lens and pre-focus to 5 meters (at f/8), everything from 2.9 meters to infinity will be in-focus. In other words, anything in your scene from two-arm lengths onward will be in-focus.



→ Assignment 4: Pre-focusing in Street Photography

Worksheet Part 1: Pre-focus and track shutter speed and focusing distance while shooting.
Worksheet Part 2: Analyze your scans to see if your photos are properly exposed and in-focus.

ASSIGNMENTS

1. Pre-focus your lens to 1.2 meters, and shoot an entire roll of film at 1.2 meters.

2. Shoot at least three frames of each scene to make sure at least one is in focus.

3. Spend an entire day guessing your focusing distances on static subjects in your home.

REFLECTIONS

How did pre-focusing work for me?

Assignment 4: Pre-focusing Street Photography *(Part 1/2)*
- Stick to one camera, one lens, and no lens filter - Use 35mm ISO 400 film - Shoot all photos at f/8, on a sunny day - Practice pre-focusing at different distances: .7m, 1.2m, 2m, 5m - Take at least three photos of the same scene

#	F-stop	Shutter Speed	Focusing Distance	Notes
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16	f/8			
17	f/8			
18	f/8			

Camera & Lens:	Film & ISO:
Start: / /	End: / /
Content Summary:	

#	F-stop	Shutter Speed	Focusing Distance	Notes
19	f/8			
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28	f/8			
29	f/8			
30	f/8			
31	f/8			
32	f/8			
33	f/8			
34	f/8			
35	f/8			
36	f/8			

Analysis 4: Are my photos in-focus? *(Part 2/2)*

Have a lab develop and scan your film. Afterwards examine each frame to learn from your successes and mistakes with pre-focusing.

Exposure

-	under-exposed
0	just right
+	over-exposed

Camera & Lens:	Film & ISO:
Start: / /	End: / /
Processed: / /	Lab:
Scanned: / /	Archived: / /

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5. HOW TO PUSH FILM

If you shoot street photography on film, I recommend you to "push" the film.

Pushing film under-exposes your entire roll of film, and the it allows you to shoot with a faster shutter speed. The benefit of a faster shutter speed is that your photos are more likely to be sharp.

I recommend pushing Kodak Tri-X ISO 400 black and white film to ISO 1600. Ilford HP5 is also good. If you want to push color film, I recommend using Kodak Portra 400.

You can push any ISO speed film to any ISO. The more you push your film, the more grain and contrast in your photos.

I think pushed film looks aesthetically beautiful. In street photography, I recommend shooting at f/8, because you are more likely to have an in-focus subject. Pushing your film will also allow you to have a faster shutter speed (your photos are more likely to be sharp).

If you are still unsure whether to push your film just Google: "How to push film for 'Camera X'".

There is also "pulling" film, which reduces contrast and grain. To "pull" film, reverse the instructions to "pushing."

→ *Assignment 5: Shoot with Pushed Film*

Worksheet Part 1: Push your film and track your aperture, shutter speed, and light conditions while shooting.
Worksheet Part 2: Analyze the results of your scanned pushed/pulled film.

GUIDE

How to push an entire roll of black and white ISO 400 film to 1600:

1. With a permanent marker, write "1600" on your roll of film.

2. Set the ISO dial on your camera to 1600. This will 'trick' your camera's light meter into thinking that you are shooting with ISO 1600 film. In reality, you are under-exposing your ISO 400 film "2 stops". If your camera does not have an ISO dial, switch the light meter app on your phone (or your real light meter) to ISO 1600.

3. When you get your film processed at the lab, tell them to "push the film 2 stops" or that the ISO 400 film should be developed at ISO 1600.

Note: Pushing film costs more money to develop at the lab because it increases the development time.

REFLECTIONS

What are the results of my pushed film?

How did pushing film affect the sharpness of my photos?

Do I like the look of my pushed film?

Assignment 5: Shoot With Pushed Film *(Part 1/2)*	
- Push an entire roll of 35 mm, ISO 400 b/w film to ISO 1600 - Set the camera ISO dial to 1600 or use a light meter - Try to photograph moving subjects in the streets	
Note to self:	Pull -2 -1 Push +1 (+2)

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Analysis 5: Results of Pushed Scans *(Part 2/2)*	
Camera & Lens:	Film & ISO:
Start: / /	End: / /
Have a lab develop and scan your film. Tell them to "push the film 2 stops." Afterwards examine each frame.	

Pull -2 -1 Push +1 (+2)	Processed: / /
Lab:	Developer:
Scanned: / /	Archived: / /
Notes:	

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6. DEVELOPING & SCANNING

Everyone has a different approach to developing, scanning, and archiving their photos. It is important to think about what works best for you in terms of time, cost, and convenience. Many people love the science of development and scanning and enjoy developing film themselves.

Personally, I prefer focusing my time and energy on shooting. I respect those dedicated to the hands-on craft of film developing, but I send my film to the lab to get developed and scanned. Regardless, I encourage you to learn how to develop and scan your own film.

Home Film Development
Black and white film is easy to process at home with a 'changing bag' (you do not need a full-on darkroom to develop at home). There are many YouTube videos on how to develop your own black and white or color film at home.

Scanning
If you are on a budget, scan your film yourself. If you have the money, ask the lab to scan your film. If you want to scan yourself, pick up a cheap Canon, Epson, or Plustek scanner. I find the best "bang-for-the-buck" scanner is the Epson V700 (scans both 35mm and medium-format film).

With the digital scans, use Lightroom or Photoshop to adjust the contrast, brightness, exposure, highlights, and shadows. With scans, you have a lot less control than dealing with RAW images. But a little post-processing with digital tools will help improve the look of your images.

A lot of people wonder: What is the point of shooting film if you are just going to scan the photos digitally anyways? For me, I still prefer the process of shooting film and the aesthetic look of film photos.

ASSIGNMENTS

1. Learn how to process your own film at home from YouTube tutorial videos.

2. Learn how to scan your own film at home.

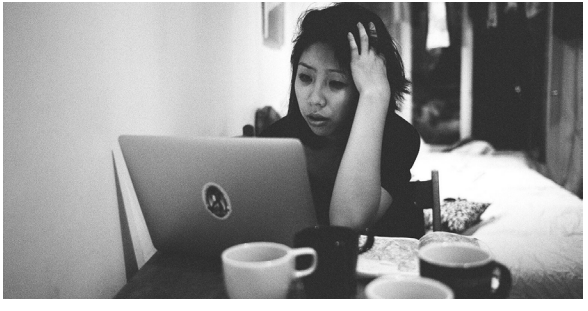
3. Attend a darkroom printing class, and learn how to make your own darkroom prints in b/w and color.

4. Reflect on the time/cost of developing and scanning your film yourself, versus sending it to the lab. What is your time, money, and energy worth?

MY WORKFLOW

Development:

Scanning:



7. ARCHIVING AND STORAGE

I am horrible at organizing and storing my negatives and digital scan files.

I have friends who are diligent about cutting their negatives, putting them into clear sleeves, and keeping them organized according to date, camera, lens, and film.

Personally, I just throw all my film negatives into a box and forget about them. I know that if one day I need to find my negatives, they will all be there (but very disorganized).

If I could do it all over again, I would keep my negatives organized according to date, location, and keep them stored in a safe place.

One of the benefits of negatives (versus digital files) is that in 200 years, the negatives will still exist in a physical form. In contrast, digital file formats are constantly changing. How easy will it be for future generations to access our digital RAW files, trapped in hard drives?

I have a friend who takes all of his family photos on film, because they will always have access to seeing the images without having to use some digital device to access them.

Sure your house can burn down and you can lose all of your negatives. I recommend a hybrid approach: keep your negatives organized, and keep many digital backups of your scans in hard drives and on the cloud.

Another idea is to print your photographs. You can make photo books or share prints with your friends and family. The images can then exist in real life and be appreciated by others. 200 years from now, it will be easier to look at your prints than to look at them on a smartphone.

ORGANIZATION IDEAS

Organize film negatives by

[ ] Binder (year, location, film type)
[ ] Boxes (subject-matter, project, color or b/w)
[ ] Other _____

Organize digital scans by

[ ] External hard drives
[ ] Cloud storage (Dropbox, Google Drive)
[ ] Folders on computer according to year-month-day
[ ] Folders on computer according to camera-film-lens
[ ] Other _____

Metadata to include: _____,_____,_____,_____

Date, Location, Camera, Lens, Film type

MY WORKFLOW

Film negatives:

Digital scans:

8. FILM ASSIGNMENTS

Here are some assignments you can do to challenge yourself and develop your own style. Use the following blank worksheet pages to track your settings while shooting and analyze your scanned results.

✓	*ASSIGNMENTS:*
	Shoot 1 roll of film only in your home
	Shoot 1 roll all photos with a flash
	Finish 1 roll of film in 1 day
	Shoot 1 roll of film with a color lens filter (for b/w)
	Shoot 1 roll of film at night with ISO 1600
	Shoot 1 roll of film with only self-portraits of yourself (on a tripod, selfie in mirror, reflections, shadows)
	Shoot 1 roll of only street portraits (1 photo per stranger) – a total of 36 street portraits
	For every photo you shoot on film, take the same photo on your smartphone
	Shoot 1 roll of film focusing on only textures
	Shoot 3 rolls of film: 1 for circles, 1 for squares, and 1 for triangles
	Try out medium-format film
	Try out large-format film
	Self-publish a 'zine' of your 10 best film photos
	Exhibit your best 5 film photos at a local cafe

MEDIUM-FORMAT FILM

Most street photographers I know prefer 35mm film. Why? You get 36 photos on a roll (compared to 10-12 photos on medium-format cameras). Also, 35mm cameras are smaller and easier to carry with you on a daily basis.

A medium-format camera shoots with larger pieces of film – which means that the photos have more detail and sharpness. Medium-format film is quite popular with "environmental portraiture" – when you get a subject to pose in front of an interesting background. Medium-format film is also good for urban landscapes and still subjects.

I have toyed around with a lot of medium-format film cameras, and while I do like the additional detail, I prefer the convenience and cheaper cost of 35mm film.

But like everything in life, it is good to experiment. Try experimenting with medium-format film to see if you like it.

For street photography, the best medium-format film rangefinder is the Mamiya 7 camera (that make 6x7cm images). If you prefer square images (6x6cm images) the Mamiya 6 is a good compact option.

I also like the Hasselblad medium-format cameras, which are good for urban landscapes and posed environmental portraits. The downside, however, is that they are really big, heavy, and overall cumbersome to use. Also check out the Bronica, a more affordable Hasselblad.

Alternative and more compact setups are "TLR" cameras (Rolleiflex, Yashicaflex) or any other film camera that end in "flex".

Camera & Lens:	Film & ISO:
Start: / /	End: / /
Content Description:	

#	F	S.S.	Notes	♥	Notes on Scanned Results

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Lab:	Developer:
Scanned: / /	Archived: / /
Notes:	

#	F	S.S.	Notes	♥	Notes on Scanned Results

Camera & Lens:	Film & ISO:
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Content Description:	

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#	F	S.S.	Notes	♥	Notes on Scanned Results

Camera & Lens:	Film & ISO:
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Camera & Lens:	Film & ISO:
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#	F	S.S.	Notes	♥	Notes on Scanned Results

Camera & Lens:	Film & ISO:
Start: / /	End: / /
Content Description:	

#	F	S.S.	Notes	♥	Notes on Scanned Results

Pull -2 -1 Push +1 +2	Processed: / /
Lab:	Developer:
Scanned: / /	Archived: / /
Notes:	

#	F	S.S.	Notes	♥	Notes on Scanned Results

10. BEAUTY IN IMPERFECTION

The beauty of shooting film is that it is imperfect. Rather than a digital image rendered as 1's and 0's — with film, you capture photons of light layered on top of the film negative.

I love shooting film because it is imperfect. I find beauty in imperfection. I think film photos are aesthetically more pleasing because the grain in film photos are randomly dispersed. High-ISO noise in digital photos can look ugly. The imperfection of film photos make the image feel more real, authentic, and raw (just like real life).

If you shoot film, you will get scratches (from improper scanning), grains of dust (discovered through the scanning process), and imperfect exposures.

But remember, the point of photography is to find more personal meaning in your life. Photography can help you find beauty in the mundane and appreciate the world around you. It does not matter if you shoot film or digital. You can make photos with any camera, phone, lens, film, or any sensor.

I prefer shooting film because my film photos evoke more of an emotional response in my heart. Aesthetically, the 'look' of my film photos brings me joy. Shooting film helps me 'zen' out – and feel more peaceful and tranquil. I like the minimalism of shooting film, and I love the idea that I never need to upgrade my film camera.

Remember that photography is an inner journey and opportunity for self-expression. Enjoy the process.

Always,
Eric

REFLECTIONS

What are the benefits of shooting film versus digital for me, and vice-versa?

Does shooting film change my photography? My subject matter? My shooting style and process?

Is shooting film important to me? Why? Why not?

Why do I make photos?

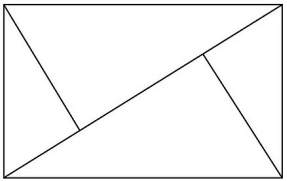
QUICK TIPS

1. For film, it is better to overexpose than underexpose.
2. When shooting indoors, shoot wide-open.
3. Shoot a scene 25% more than you think you should.

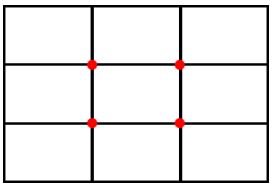
COMPOSITION TIPS

1. Take three steps closer.
2. Look at the edges of the frame.
3. Get a clean background
4. Look for gestures.
5. Work the scene.

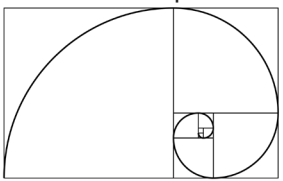
Golden Triangle



Rule of Thirds



Fibonacci Spiral



SAMPLE STREET SETTINGS

ISO 400	ISO 1600
SUPER-BRIGHT SUNNY DAY Aperture: f/8 Shutter Speed: 1/1000th	*SUPER-BRIGHT SUNNY DAY* Aperture: f/16 Shutter Speed: 1/1000th
OVERCAST Aperture: f/8 Shutter Speed: 1/250th	*OVERCAST* Aperture: f/16 Shutter Speed: 1/250th
SUNSET Aperture: f/8 Shutter Speed: 1/125th	*SUNSET* Aperture: f/8 Shutter Speed: 1/500th
SHADE Aperture: f/8 Shutter Speed: 1/60th	*SHADE* Aperture: f/8 Shutter Speed: 1/250th
INDOORS Aperture: f/2 Shutter Speed: 1/30th	*INDOORS* Aperture: f/2.8 Shutter Speed: 1/60th