

Learning the Basics: Camera Operations

PART I

APERTURE AND DEPTH OF FIELD

- Choose an ISO, and focal length as your constants. Adjust your shutter speed for a proper exposure after choosing your aperture.
- Take some pictures far away from your subject with a small aperture opening. (the number will be larger i.e f/11)
- Take some pictures close to your subject with the same small aperture opening.
- Take some pictures far away from your subject with a large aperture opening. (i.e f/2)
- Take some pictures close to your subject with the same large aperture opening.

SHUTTER SPEED AND MOTION

- Choose an ISO and focal length as your constants. Adjust your aperture for a proper exposure after choosing your shutter speed.
- Take some pictures with a fast shutter speed (i.e 1/125) of a slow moving subject.
- Take some pictures with a fast shutter speed of a fast moving subject.
- Take some pictures with a slow shutter speed (i.e 1/60) of a slow moving subject.
- Take some pictures with a slow shutter speed of a fast moving subject.

PART II

SHUTTER SPEED AND APERTURE

- Choose an ISO and focal length as your constants.
- Experiment using different combinations of shutter speeds and apertures together. See what happens. Change your distance from your subject, see what happens.

PART III (if you have a variable focal length lens)

FOCAL LENGTH

- Choose a single scene and ISO as your constants.
- Choose any combination of aperture and shutter speed that gives you a correct exposure.
- Without moving from one location, take some images with different focal lengths, see what happens.

Exploring the Unfamiliar

You have probably heard the old cliché that a “picture is worth a thousand words,” well what are a thousand pictures worth? For your first assignment, I want you to go out and explore a new location. Embrace your adventurous side and get to know something unfamiliar. Find a space or location that is outside of your daily routine or circle of familiarity. Step out of your comfort zone! This is your starting point.

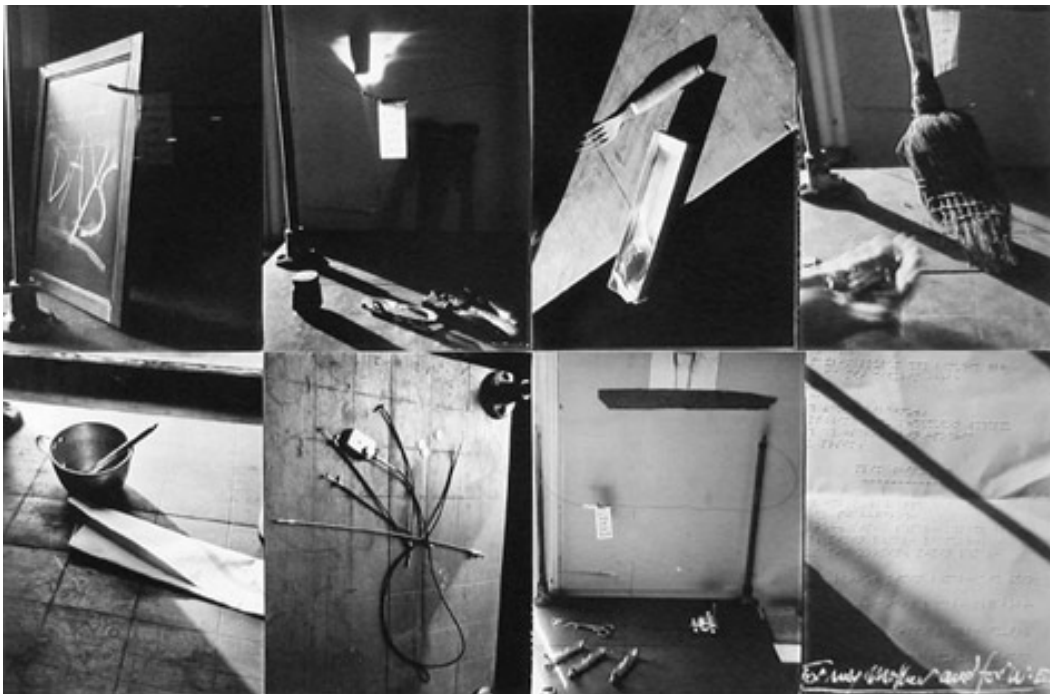
Take as many photos as you can to document and illustrate the space or location. Imagine that you are trying to describe this place to an alien, how would you go about recording the space to explain it to an entirely different life form? With no words, or body language, all you have to use are images.

Your location should be of a reasonable size, i.e. choosing the whole NIU campus is a bad idea, choosing a single street, park, or alleyway is a better one. Pay attention to all of the details around you, look up, look down, get close, and look at the overall scene. Think about different perspectives you can view the space from, i.e. from above or on your stomach. **Try not to take the same photograph twice and don't delete anything!**

You can stop shooting when you have a.) filled your memory card or b.) feel that you have taken as many images as you could. **You should have at least 100 photos** but will probably find that you shoot more! Don't worry if everything isn't perfect; try to be creative and think on your toes. Try to be as complete in your 'description' as possible.

If you're feeling extra adventurous, experience the location at two different times of day. Lighting changes the way we look at a space. This could be an interesting experiment.

DUE: THURSDAY 9/13



Tools – For My Mother and W.E., Robert Frank

Technical Aspects of the Assignment:

Shoot in B&W JPEG, Shoot in Matrix mode, Shoot at least 100 photos, more are encouraged, Bring image files to next class! Thursday 9/13

Introduction to Adobe Bridge CS5

Bridge can access files on your computer just as Finder or Explorer does. You can navigate through the computers folders in a very similar way.

On the left hand side of the screen, you can use the Favorites or Folders tab to browse your folders and files.

On the bottom right of the screen, you can control the size of the thumbnail previews in the Content Window as well as how you view the images and what details are shown alongside of the file.

Bridge allows you to view thumbnails of many different file types while Finder or Explorer does not. Often times they just show a logo for the program used to create or open the file. This is one benefit of using Bridge to navigate through your image files.

ANYTHING YOU ALTER IN BRIDGE ALTERS THE ORIGINAL FILE! i.e. File name, metadata, file type, etc.

If you have the preview tab open, you can view a larger image of the selected file. If you want to view this image without any distractions, click on the file and press the "Spacebar" key. Press "Spacebar" again to go back to the Bridge full view.

You can also use the Zoom or Loup tool to get a closer look select areas of your preview image.

Setting up a Workflow (Page 80):

Capture:

Capturing the image involves you using your camera to expose your digital sensor to light which is then converted into digital information that is stored on your CF or SD card until you transport the files.

Import or Download your images:

File: Get Photos From Camera: (if it asks about auto launching click don't show again and NO): Get From- choose your device: Choose Location: Create Subfolder for Files (Assignment): Rename Files: Advanced ReName: Preserve Current File Name To XMP: Open Adobe Bridge: Get Photos.

Or use the camera and arrow icon on top left tool bar.

Organize:

Using Bridge, this is where you begin adding Key Words and other Metadata to your files to make it easier to relocate them in the future. You will also be ranking your images with the Star option to keep further track of the progress of your images.

File:Info... fill out window
Or go through keyword tab

Edit:

We will be using Camera RAW for all of our editing needs. Here you can adjust your photograph as needed.

The second you pull your files into Camera RAW a .xmp file is created to go along with your image file. This file contains the alterations and attachments that you have made to your original RAW file. **ANYTIME YOU MOVE YOUR RAW FILE THE .XMP FILE MUST MOVE WITH IT OR YOUR ALTERATIONS WILL NOT APPEAR WHEN YOU OPEN THE FILE!**

Output: For turning in assignments or printing

Preparing your files for turning in assignments:

Once you have Key worded and edited your files to completion, Select all of your files in Bridge: Open in RAW: Select All: (Convert to greyscale if you could not shoot in monochrome): Save Images: ***Create New Folder** in Select Folder Section* (if you don't, you will lose all of your RAW files!): Destination: Save in New Location: Browse for your new folder, or create it there: Name files with Your Name/Assignment/3digit number: File extension .jpg: Format – JPEG Medium/Low.

Next class we will be learning how to print your photographs.

Archive:

We will also learn some basic archiving techniques next class. This also includes backing up and archiving your actual image files as well. Be sure to duplicate files onto separate hard drives as well as Dvds. You should have all of your images files saved and safe in AT LEAST two different locations at all times.

Batch Renaming Multiple Files:

Use this to rename multiple files.

Tools: Batch Rename – this will affect all of the files being shown in the content window, if you didn't select any specifically. Command + a to select all.

You can place renamed files to a new folder, or copy to a new folder, or keep them in the same folder.

You can preview file names on the bottom of the Batch Rename window. You can add multiple fields to the file name by clicking the + sign on the right.

If you need, you can preserve the original file name in the metadata. Bridge renames files in the order they are viewed in the content window.

Compact Mode:

Command Return (Enter) or click upper right button of two windows. Bridge windows stays on top even while working in other programs. Great for dragging and dropping image files into other programs and documents.

Adding and Using Metadata and Keywords:

Metadata is information associated with a file that you don't always see when viewing a file or when you print it.

Some automatically added, some you add later.

Keywords are tags that you associate with a file. This is done manually.

Left side: Filter

This allows you to narrow down your searching and selection shown in Content

To add Keywords: Essentials: Keywords (top): + (bottom right)

Add key words: Your Name & The Assignment # must be key words on all of your files.

Using the Star System:

I want you to use the star system as another form to organize your files.

One star should be used for images you like

Two stars for your favorite of those images

Three stars for photos that you have begun editing

Four stars for photos that are almost done but still need a little work

Five stars for complete and finished images that are ready to print.

To add stars you can click the dots below the image or select a file/s and go to Label and select the star rating. You can also clear your ratings from this menu. Through the Label Menu you can also highlight your files to make navigation easier while searching for files.

Green: Approved, Yellow:Second, Red:Select, Teal: Review, Purple:To Do

This can be another way for you to organize, but keep in mind that I will only be paying attention to the star ratings while reviewing your files.

Searching for Files:

Searching for files in top right Search Field. It only searches the folder you select and anything within that. The search engine also looks through your keywords.

This is something to keep in mind while key wording your files.

Use the Spotlight search if you only want to search file names

Bridge search: current folder and subfolders

Edit: Find

Choose folder you want to search through
Criteria: choose pull down options – all metadata
Use the + symbol to add more details to your search
Match: set to what matches your search best

Collections:

Click Collections tab on Left

Bottom of window on right: New Collection

Title Collection

Drag and Drop images into it – this creates aliases (or references) but it does not move the actual files.

The same image can be in multiple collections.

Smart Collection – keeps track of items that match your original find used to create the collection.

Right click (Control click) and remove from collection if you want.

Creating a Contact Sheet:

Top right: OUTPUT

Gather all images you want into the content pain. Select images you want to include in contact sheet

PDF

Choose your template- Refresh preview to see what your printable page would look like

Choose paper size and quality, etc.

Layout: if in custom, you decide columns and rows

Overlays: choose text included and character details Can add page footer number if you would like.

Playback: click off auto advancing etc.

Watermark: click off

Research Paper and Presentation

Throughout the semester we will continually be looking at various photographers in assorted genres. In order to gain a fuller range of knowledge on specific photographers, each of you will be required to give a 15 minute presentation and an accompanying 3 page paper on an established photographer of your choice. Your presentation and short paper should not work just to give a biographical overview of the artist that you choose, but you should rather explore the photographer's work more deeply, thinking critically about the work. Research should be conducted in the library and you may include **credible** Internet resources as well. You should make documentation of all your sources and include a short bibliography with your paper. You must include at least 5 different sources, **3 of which should be published sources (books/magazines)**. Your presentation should include plenty of images to show the class.

There will be a projector provided in class for you to show your presentations. I recommend Power Point, but if you have another preferred method of presentation we can discuss it. You will choose the date of your presentation and your photographer next class (Tues. 9/4). Photographers are first come first serve, have a few choices in mind if someone picks a photographer before you. **Presentations will start on October 2nd** and run through the semester.

I've included a list of 100 photographers that would be great choices for your topic. If you have a different photographer in mind that is not on the list, please discuss this with me.

Adam Bartos	Diane Arbus
Alec Soth	Dorethea Lange
Andres Serrano	E.J. Belloq
Araki	Eadweard Muybridge
Arnold Newman	Edward Curtis
Arthur Stieglitz	Edward Steichen
August Sander	Edward Weston
Barbara Kruger	Eikoh Hosoe
Barry Feinstein	Eliot Porter
Bernice Abbot	Erwin Olaf
Bill Brandt	Eugene Atget
Brassai	Eugene Meatyard
Bruce Davidson	Fredrick Sommer
Carlton Watkins	Gary Winogrand
Carrie Mae Weems	Gertrude Kasebier
Charlie White	Gordon Parks
Christian Boltanski	Gregory Crewdson
Cindy Sherman	Hannah Hoch
Claude Cahun	Hans Bellmer
Daido Moriyama	Harry Callahan
Danny Lyon	Helmut Newton
Dennis Stock	Henry Wessel

Imogen Cunningham
Irving Penn
James Fee
James Van Der Zee
Jeff Wall
Jerry Ueslman
Joel Peter Witkin
Julia Margaret Cameron
Kahn and Selesnick
Lazlo Moholy Nagy
Lee Friedlander
Les Krims
Lisette Model
Lorna Simpson
Lothar Wolleh
Man Ray
Manuel Alvarez Bravo
Martin Parr
Mary Ellen Mark
Masahisa Fukase
Mike and Doug Starn
Minor White
Nan Goldin
Nancy Burson
Paul Outerbridge
Paul Strand
Philip Halsman
Philip Lorca DiCorcia

Richard Avedon
Richard Misrach
Rineke Diesktra
Robert Adams
Robert Capa
Robert Frank
Robert Heineken
Robert Mapplethorpe
Roger Fenton
Roy DeCarava
Sally Mann
Sandy Skoglund
Shadi Ghadirian
Shomei Tomatsu
Steven Shore
Timothy O'Sullivan
Tina Barney
Tina Modotti
Tokihiko Sato
Uta Barth
W. Eugene Smith
Walker Evans
Weegee
William Eggleston
William Klein
William Ropp
Yinka Shonibare
Yousuf Karsh

Equivalent Exposures and Spot Metering Practice Worksheet

Part I: Equivalent Exposures

Set camera meter mode to matrix. Set a constant ISO and choose a constant focal length. Try to *use full stops*.

(f2, f2.8, f4, f5.6, f8, f11, f16, f22) (1/8s, 1/15s, 1/30s, 1/60s, 1/125s, 1/250s, 1/500s)

- i. Get close to 3 different subjects. Make 3 Equivalent Exposures of each.
- ii. Get far away from 3 different subjects. Make 3 Equivalent Exposures of each.

Part II: Spot Metering

Set camera to spot metering mode. Set a constant ISO, choose a constant focal length. Try to use full stops.

Choose 10 Different Scenes to spot meter.

For each scene:

- i. Spot meter for the highlight (the brightest part of the scene). Take a picture. Write down your aperture and shutter speed.
- ii. Spot meter for the shadow (the darkest part of the scene). Take a picture. Write down your aperture and shutter speed.
- iii. Using the information from metering for your highlight and metering for your shadow, figure out what the average exposure for the scene should be. Take picture.

EXAMPLE:

You meter for your highlight which you expose at f/5.6 @ 1/500s. Take a picture.

You meter for your shadow which you expose at f/5.6 @ 1/30s. Take a picture.

There is a 4-stop difference between f/5.6 @ 1/500s and f/5.6 @ 1/30s. The proper average exposure for your scene is f/5.6 @ 1/125s. Take a picture.

PART III: Spot Metering and making an Equivalent Exposure

Choose one scene. Choose a constant ISO and Focal Length. Use full stops.

- i. Spot meter for the proper exposure in both your highlight and shadow areas.
- ii. Make 3 Equivalent Exposures of this scene based off of the proper exposure you found using spot metering. (Each exposure should have a different f stop and shutter speed but equal exposure.)

Portraiture and Basic Lighting Worksheet

Part I: Natural lighting

Set camera to spot metering mode. Pose your model in a space that is lit by natural lighting (the sun). This can be indoor (near a door or window) or outdoor, but must not contain any artificial light.

- i. Take 2 photos of your model lit from the front (sun behind you).
- ii. Take 2 photos of your model lit from the side.
- iii. Take 2 photos of your model backlit.

Part II: Artificial Lighting

Set camera to spot metering mode. Pose your model in a space that is lit by artificial light (Man made, ie. Lightbulbs). This must be indoor (during the day the sun will over power artificial light).

- i. Take 2 photos of your model lit from the front.
- ii. Take 2 photos of your model lit from the side.
- iii. Take 2 photos of your model backlit.

Part III: Bouncing/Reflecting, and Diffusing Light

Set camera to spot metering mode. Pose your model outdoors and/or indoors using natural and/or artificial light.

- i. Take 2 photos of your model using bounced or reflected light.
- ii. Take 2 photos of your model using diffused light. Get creative.

On the back of this sheet, write notes of your experience shooting with each different lighting situation. Think about how textures are shown, density of shadows, how the light affects the models facial structure, etc.

Short Stories

Part I: Shooting – Capturing the Action

Choose an activity or an action that requires multiple steps. Using your camera create a chronological sequence of images that illustrate this activity from start to finish. Imagine you are trying to explain this activity to someone without words. For example, you visually describe how to get to the Art Museum from the Art Building, or you visually describe all the steps needed to check out a book from the library. Be as thorough in your sequence as possible.

Part II: Editing – Defining the Action

You will take what you have shot and create five sequences/sets through editing and organizing your images.

1. Your literal sequence. All the images needed to describe the activity as accurately and completely as possible.
2. A sequence of 10 of your images that includes only the essential elements needed to be understood.
3. A sequence of 5 images that includes that most basic elements of the activity, this could be an abstract interpretation of the activity where the literal time structure of the activity does not matter.
4. Triptych a set of 3 images that work together to describe the activity.
5. Diptych a set of 2 images that work together to describe the activity.

Create a folder labeled “YourNameSequences”

Make a subfolder for each image set and label folder 1, 2, 3, 4, and 5 to correspond with the numbers above for each sequence.

On the back of this sheet, briefly explain what factors you used to edit down your images throughout the assignment. What were your struggles? What images were easy to edit out? Why are the final two images the most important to your story?

