USC SCHOOL OF ARCHITECTURE

Instructor: Michael Arden

ardenm@usc.edu



CALENDAR

# COURSE DESCRIPTION

CLASS POLCIES

ASSIGNMENTS

CAMERA, FILM & DIGITAL SUPPLIES

EXPOSURE

LOG SHEETS

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WEEK	DATE	ТОРІС
1 2	8/25 9/1	INTRODUCTION- <i>Film, Digital, Light and Exposure</i> LEARNING TO LOOK AT YOUR FILM <i>Comparison of Film vs. Digital</i> Assignment 1 due.
3	9/8	More 35mm FILM TECHNIQUES Assignment 2 due
4	9/15	Introduction of DSLR Techniques Introduction to Lightroom and monitor calibration Assignment 3 due and work on midterm project
5	9/22	Watch Visual Acoustics, The Modernism of Julius Schulman. On Netflix or Amazon. Write a 1 page paper.
6	9/29	Lightroom settings and metadata/copyright info Assignment 4 & 5 due
7	10/6	MIDTERM SLIDE SHOW PRESENTATION Lightroom Library Module Assignment 6 due
8	10/13	PRESENTING THE 4X5 SINAR CAMERA
9	10/20	FIELD TRIP #1 (8am –noon) 4X5 AND <i>DIGITAL LARGE FORMAT</i> <i>Lightroom Develop Module</i>
10	10/27	Assignment 7 due FIELD TRIP #2 (on Sat. or Sun.) Advanced 4x5 and Advanced DSLR Assignment 8 due
11	11/3	Advanced DSLR & Printing Assignment 9 due
12	11/10	FINAL PROJECT REVIEW Assignment 10 due
13	11/17	FINAL PROJECT REVIEW Exhibition Paper due Assignment 10 due
14	11/24	Thanksgiving Break
15	12/1	FINAL PROJECT REVIEW

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Final 12/11

# COURSE DESCRIPTION

#### **35MM PHOTOGRAPHY PRINCIPLES AND TECHNIQUES**

In this course we will utilize a series of assignments to facilitate your learning of classroom lessons with film and 35mm SLR cameras.

# THE AMAZING SINAR 4x5 LARGE FORMAT CAMERA WITH FILM AND SINAR ARTEC, A MILESTONE IN DIGITAL ARCHITECTURAL PHOTOGRAPHY

This format camera has been used since the beginning of commercial photography. Not only does this camera allow a larger image area, it has the ability to correct distortion and parallax problems. In architecture this is a must. This camera is not only a tool for parallax distortion but will teach you to see light. The digital ArTec will take us well into the 21<sup>st</sup> century of digital architectural photography using the highest standards currently available.

Small groups of 3-5 students will each have a Sinar 4x5 camera to use and work with both independently and collectively. The ArTec will be used during class or on filed trips. This camera will be on loan for a few weeks due to its price tag of \$50,000.

#### LIGHTROOM AND 35MM DIGITAL ARCHITECTURAL PHOTOGRAPHY

The student will become a highly competent creative digital photographic image creator with accurate exposure, proper color correction, and excellent printing output. You will master Adobe Lightroom 5's Library and Development modules as well as successfully integrate specific digital tools for architectural image such as free-transform/HDR.

#### Upon completion, each student will possess the following skills:

- Comprehensive understanding of architectural lighting.
- Comprehensive understanding of film, exposure and light balance.
- 4x5 camera functions and parallax corrections
- Heightened sensitivity to light and how it strengthens architectural design
- Ability to use High Dynamic Range (HDR): multiple exposures to create dramatic architecture/interior images without additional professional lighting.
- Control of Parallax (Free Transform Procedure) to correct distortion and perspective so buildings do not look like they are leaning to one side or falling back.
- Creation of exceptional images with light and architecture, including dusk imagery.
- Advanced amateur use of most Single Lens Reflex (SLR) digital camera functions, including: shooting raw, processing in Adobe Bridge and

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Photoshop CS5/CS6, batch processing, organization, color temperature, exposure/histograms, color management (curves/levels).

- Advanced use and knowledge of Adobe Lightroom 5.
- Knowledge of how to do a monitor calibration.
- Advanced eleven color profiled printing

#### ITEMS YOU NEED TO KNOW

- You need a 35mm SLR film camera with complete manual functions or you can check one out for daily use from our Photo Lab.
- You need a 35mm DLSR camera.
- You need a notebook to keep all your assignments together.
- Assignments are to be turned in on the due date. If you are a week late your grade will drop one letter.
- Purchase a minimum of 5 rolls for the rest of the 35mm assignments. These rolls will daylight **Fuji Provia 100**
- It will be VERY wise to purchase a tripod (from \$30 \$250.)
- You might want to purchase a loupe. They range from \$8 to \$200. The \$40 Peak 8x loupes are the best value.
- 4x5 film purchases: we will discuss this later.
- You must have Adobe Lightroom Creative Cloud.
- Mandatory Text: D-65's Lightroom Workbook, Workflow, Not Workslow in Lightroom 4 (2012) by Seth Resnick and Jamie Spritzer. Order on Amazon \$29.95 and Lightroom 6 supplement.
- You need access to Adobe Photoshop CC, Compact flash card (min. 8 gigs.) and a laptop computer.
- You need to purchase Photomatix Pro 5, student pricing is 75% off. Available to university/college students currently enrolled in photography (or other field involving HDR imaging) as major or photography student. This could be a scan, photograph or screen shot of your class schedule, unofficial transcripts, a receipt for the course or some other similar document. When replying with your documentation please try to limit the size of attachments to 1MB and use a standard email attachment format like JPEG or PDF. Note that it may take several business days before we reply to email requests for an academic discount. We prioritize requests for support over those for discounts, so we ask for and appreciate your patience.
- Film Supplies: SAMY'S 431 S. Fairfax Ave. 323-938-2420
- **Professional Labs**: The Icon 5450 Wilshire Boulevard 90036

323.933.1666 / www.iconla.com Parking: Free Parking available on Cochran Ave

- THE Two "ALWAYS"
  - 1. Always use log sheets & bring them with your assignments.
  - 2. Always bring your cameras to class

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# **Text and Reading Materials**

#### **Required:**

Seth Resnick and Jamie Spritzer, *D*-65's Lightroom Workbook, Workflow, Not Workslow in Lightroom 4 (2012)

Joseph Rosa and Esther McCoy, *A Constructed View: The Architectural Photography of Julius Shulman*,(2008, Rizzoli International Publications). ISBN: 0847817776 (on sale on Amazon for \$29.95 **Seth Resnick and Jamie Spritzer.The Free PDF for Lightroom 6** Jim Lowe, *Architectural Photography Inside and Out* (2006 Photographers Institute Press) ISBN:1861084471 Film vs. Digital by Ken Rockwell http://www.kenrockwell.com/tech/filmdig.htm

#### Reading Recommended:

Richard Ross (Photographer), *Architecture of Authority* (2007, Aperture). ISBN: 1597110523 Gerry Kopelow, *Architectural Photography: The Digital Way* (2007, Princeton Architectural Press). ISBN: 1568986971. Michael Harris, *Professional Architectural Photography, Third Edition* (2002, Focal Press). ISBN: 0240516729 William Flusser, *Towards a Philosophy of Photography* (2007, Reaktion Books), ISBN 1-861890-76-1

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# **CLASS POLICIES**

# STUDENT RESPONSIBILTIES & GRADING

#### Active Participation & Attendance –10%

This is a small class and your presence is necessary. Class will start at 10:00 am on Fridays. At 10:10 attendance will be marked. After 10:10 you will be marked absent for this day. If you do miss class it is your responsibility to obtain any information (from another student.) If for some reason you find that you *must* be absent or late it is essential that you notify me in advance by email. Active participation includes weekly-prepared questions.

Please see USC School of Architecture's attendance and grading policy on the following page.

#### Assignments – 20%

Assignments must be turned in on time. These are not graded on quality. These assignments are for your learning. They will be down graded if they are not turned in on time or they are missing. If you were unsuccessful with a part of any assignment you will need to submit a redo. You are expected to keep these assignments in a notebook.

#### Midterm – Slide Show – 20%

You will select a building or structure of your choice and present 15-20 of your best images capturing your subject in the morning, afternoon and evening light as well as dusk and interior images. You should anticipate having to visit your selected location three to four times. Here you will be graded on the quality of your images.

#### Paper – Visiting a Photo Exhibition -10%

Please submit a two-page double spaced paper including what your saw and where. Information about the exhibition and what you felt in your own words. Then be sure to bring some of your newly learned photographic knowledge to your discussion of the body of work you perused.

#### Quiz – 5%

#### Final Projects – 35% 15%-4x5 20% digital project.

Each Group will turn in a minimum of six 4x5 transparencies of the highest quality. They must include images from a minimum of two different subjects. A dusk image and interior image must be represented. Both Daylight and Tungsten film must be utilized.

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#### **USC GENERAL POLICIES**

**School of Architecture Attendance Policy:** The School of Architecture's general attendance policy is to allow a student to miss the equivalent of one week of class sessions (three classes if the course meets three times/week, etc.) without directly affecting the student's grade and ability to complete the course (this is for excused absences for any confirmed personal illness/family emergency/religious observance or for any unexcused absences). For each absence over that allowed number, the student's letter grade can be lowered up to one full letter grade. This course will lower a letter grade by ½ for any absences over the allowed amount (for this class that is 1 class missed).

# Statement on Academic Conduct and Support Systems Academic Conduct:

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, "Behavior Violating University Standards" <u>https://policy.usc.edu/scampus-part-b/</u>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct: http://policy.usc.edu/scientific-misconduct.

#### Support Systems:

Student Counseling Services (SCS) - (213) 740-7711 – 24/7 on call Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. https://engemannshc.usc.edu/counseling/

National Suicide Prevention Lifeline - 1-800-273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. <u>http://www.suicidepreventionlifeline.org</u> *Relationship & Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call* Free and confidential therapy services, workshops, and training for situations related to gender-based harm. <u>https://engemannshc.usc.edu/rsvp/</u>

Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: <u>http://sarc.usc.edu/</u>

Office of Equity and Diversity (OED)/Title IX compliance – (213) 740-5086

Works with faculty, staff, visitors, applicants, and students around issues of protected class. <u>https://equity.usc.edu/</u>

Bias Assessment Response and Support

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. <u>https://studentaffairs.usc.edu/bias-assessment-response-support/</u>

Student Support & Advocacy – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic.<u>https://studentaffairs.usc.edu/ssa/</u> Diversity at USC

Tabs for Events, Programs and Training, Task Force (including representatives for each school), Chronology, Participate, Resources for Students. <u>https://diversity.usc.edu/</u>

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# ASSIGNMENTS

### **ASSIGNMENT ONE: DUE 9/1**

PART I TROUSDALE AVENUE ON CAMPUS

- 1. Need a roll of E-6 daylight 100 ISO (Fuji 100Provia).
- 2. Fill out a shooting log.
- 3. Frame numbers 1-5: using your camera's light meter take a meter reading of an 18% gray card. Frame 1: open your lens up two stops from your meter reading and shoot. Frame 2: one stop open from your meter reading and shoot. Frame 3: shoot at your meter reading. Frame 4: close down one stop from your meter reading and shoot. Frame 5: two stops closed from your meter reading and shoot. (In full sun if possible)
- 4. Frame numbers 6-9: shoot a building from a distance of 20 feet, 40 feet, 80 feet and 160 feet.
- 5. Frame numbers 10-15: photograph an entire building in full sun light and in open shade (show some sky). Bracket your exposure one stop over, one stop under and then meter reading.
- 6. Frame numbers 16-19: find details like a door, window or gargoyle that is in full sun. Shoot this at a shutter speed of 1/125 and an aperture of f8, f11, f16 & f22 (not all lenses have f22).
- 7. Frame numbers 20-23: now shoot the previous image (still in full sun) at an aperture of f16 and a shutter speed of 1/30, 1/60, 1/125 & 1/250. Hold still when shooting at 1/30.
- 8. Frame numbers 24-28: shoot any five detail shoots (a door, window, steps.) Make sure some are extreme close-ups.
- 9. Frame numbers 29-36: for the rest of the roll shoot any images you like they must include some from a very low angle, some from a very high angle, up a few floors and any other ways that are highly creative.
- 10. Take your film to an E-6 processing lab and run it normal ("N".) Do not mount. Make sure it is sleeved.

#### PART II

- 1. Bring in at least 2 pictures from architectural/interior magazines that interest you or you want to know how it was accomplished.
- 2. Bring 3 questions type-written about your assignment or any photography related problem.

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# ASSIGNMENT Two: DUE 9/8

#### PART I

- 1. Need two rolls of E-6 daylight ISO 100
- 2. Fill out a shooting log.
- 3. Be creative, artistic, playful, experiment with low angles, high angles, placement of objects, colors, shadows, textures, highlights, time of day, motion, different focal lengths and filters.
- 4. Use at least 9 frames to describe depth of field.
- 5. Use at least 10 frames for dusk or dawn images. (Need a tripod, cable release and long exposures)
- 6. Use at least 5 frames to shoot under fluorescent light.
- Use at least 5 frames to shoot under fluorescent light using a 30 magenta filter.
- 8. Shoot image of possible midterm projects sites
- 9. Process "N" and do not mount.

#### PART II

- 1. Type a list of at least 5 locations/buildings you like.
- 2. Bring 3 questions (written) about your assignment or any photography related problem.

#### PART III

- 1. Install Lightroom Creative Cloud
- 2. Read pages 1-43 in D65 book

Read and peruse all images in *A Constructed View: The Architectural Photography of Julius Shulman* (you can purchase this book or peruse in the library or lab).

# Assignment Three: due 9/15

### Part1.

Shoot 2-3 rolls of the building you choose for your midterm project. Keep accurate log sheets.

### Part 2:

Read pages 43-99 (chapter 4-6) in *D*-65's Lightroom Workbook. Due 9/15 Read pages 101-196 (Chapter 7) in *D*-65's Lightroom Workbook. Due 9/29 Download Adobe Lightroom 6 and peruse this program Due 9/15 Part 3:

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Have digital cameras ready to use by 9/29. Assignment five will include digital assignment to familiarize yourself with your DSLR

# Homework Assignment 4 Due 9/29

# Watch the movie/documentary VISUAL ACOUSTICS: THE MODERNISM OF JULIUS SCHULMAN

This on Amazon, Hulu and many other servers. The Arch library also has a copy.

Julius Schulman is known as the father of Architectural Photography. He created a **Bridge** for the everyday person to cross to see and begin to understand modern architecture. In fact, he is probably the reason you might be excited to be in the field of architecture. Most everyone has seen his iconic image of case study house #22 overlooking Los Angeles at night. Prior to Julius most architecture was seen as a rendering unless you were lucky enough to travel the world, which of course was difficult in the 1940's thought 1960"s.

This documentary has received a huge amount of praise. Please take time to be present when you are watching this film and allow Julius to speak to you from his creative heart.

Paper: Due 9/29

Please write a one page paper on your experience perusing this documentary.

Bring a hard copy of the paper to class on 9/29 to turn in.

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# Assignment Five: Due 9/29

Shoot a minimum of 3 rolls of the building you choose for your midterm project Keep accurate log sheets

# Assignment Six: Due 10/6

#### Part 1

File maintenance: students are responsible for maintaining their own digital files and keeping back ups. Always bring your flash drive to class. Always Bring your CAMERAS to class.

Information pages on Presentation Guidelines, Upload information and homework submittals will be created.

- 1. First read your camera's manual and familiarize yourself with your camera's settings.
- 2. Fill out a log sheet for all images.
- 3. Shoot a gray card or grey object (sweatshirt) at 2 stops open, 1 stop open, normal, 1 stop closed, 2 stops closed. (This should come back as a gray image from light gray to dark gray). This will test our understanding of manual camera operations, exposure knowledge and if you have your settings off of "auto".
- 4. Select a location where you can shoot the same image many times during full sunlight. This image should be an interesting piece of architecture or a detail.
- 5. Resolution: shoot your image with the maximum resolution, medium and minimum.
- 6. Compression: Shoot your image again in high, medium and low.
- 7. ISO: Experiment with at least 4 different ISO settings of the same image from low to high (100-3200 or some cameras go as high as 128,000)
- Color temperature: experiment with all the color balance modes.
   a. (Tungsten, daylight, fluorescence, flash, cloudy, etc.)
- Exposure: bracket your exposure one stop over, normal and one stop under. Use a gray card and Macbeth color chart & white balance if you have one.
- 10. Do not use Photoshop. Place these on a disk with appropriate labeling

# Midterm Slide Presentation due 10/6

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#### ASSIGNMENT Seven: DUE 10/13

- Part 1 Read Chapter 7, The Library Module, in D65 Lightroom Workbook.
- Part 2 Shoot a minimum of 40 images on your DSLR and import into Lightroom. You will be given a list of specific conditions to shoot from.

### **ASSIGNMENT Eight: DUE 10/20**

Part 1 - Read Chapter 8, The Develop Module, in D65 Lightroom workbook

- Part 2 Begin assignment Ten
- Part 3 Shoot At Least Two Color 4x5 Images and Process

# ASSIGNMENT Nine: DUE 10/27

- Part 1 Shoot At Least THREE Color 4x5 Image and Process Finish processing remaining transparencies from previous assignment.
- Part 2 Visiting a Photo Exhibition and Written Paper (Graded) (See Paper guidelines) Paper Due 11/17 Continue working on assignment Ten

# ASSIGNMENT Ten: DUE 11/3

Find a contemporary building and an historic building in downtown LA or by USC.

Shoot at least 5 different images for each. Process all 5 to the best of your ability using all that you have learned in Lightroom/Photoshop. Then process 1 image from each of the 2 buildings and process it 5 times (virtual copies) with at least 10 items in your history and make at least one copy B&W (use color channels to enhance). Then one image for each of your buildings needs to be shot for HDR, meaning take three frames of the same image (best not to be dusk shots for this). Shoot 2 stops under - exposed, Normal, and 2 stops over - exposed. You need to find your auto exposure bracketing or else bracket manually using shutter speed not aperture. Then color code your favorite image from each building.

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# Midterm and Final Projects

#### Midterm Project: Due 10/6

Create 20 amazing images from a building of our choice. Your transparencies should be mounted so we can present a slide show. Please find out some information about the building you choose to capture such as the architect and the date built. Be prepared to talk about your experience while shooting and why you chose a particular film or exposure.

You need to have at least one interior image. It can be shot from outside but must capture some interior lighting. You need at least one image on Tungsten film. You need to shoot at least three dusk or dawn images. You need to shoot your subject at different times of day/dusk/night. At least three different times must be represented.

On the day of our slide show please bring in your notebook with all your assignments in plastic sleeves. You will also need to have a page with your slide presentations and another page of your next best 20 images.

### Visiting a Photo Exhibition and Written Paper Due 11/17

Please submit a two-page double spaced paper including what your saw and where. Information about the exhibition and what you felt in your own words. Then be sure to bring some of your learned photographic knowledge to your discussion of the body of work you perused. You may also include an insert of an image from this exhibition if possible (This can be on a third page).

**Important:** please submit your paper on paper to me and also download it on the lab computer as well in the desktop folder labeled "**Paper**".

### **Final Project: Due on Final Timeslot**

- **Part 1:**Each group will turn in a minimum of 3-4 4x5 transparencies of the <u>highest</u> quality. Both a dusk image and interior image must be represented.
- Part 2:Create a dynamic photographic documentation of an architectural setting, a commercial building, residence or complex. You will turn in a maximum of 20 images. These are to be of the highest quality. See Details below.
- **Part 3:**Print two images 13x19 of the highest quality; one as a Color print and one as a Black & White print.

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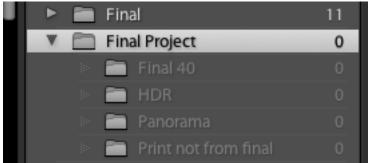
#### FINAL PROJECT DETAILS

Discussion and development of individual final projects, including documenting a specific architectural project, studying the natural and available light, and utilizing all the tools and ideas presented to create 20 excellent images that tell a story of the chosen structure.

These need to be in your collection under USC Fall2014 421 and your name. Under your name in Lightroom create the following:

Folders: Final Project

Subfolders: HDR-processed and 3 (a min. of 2 images and up to 10) Panorama- all 3 or more images and processed panorama Final 40



\*Since some of your finals will be in the HDR and panorama you do not have to have the full 20 showing in "final 20-40" folder. Mark the ones you will be using in your HDR and Panorama by using a color label. Then make certain (or you will be downgraded) your final 20 are in the collections area in the USC 421 folder and in a subfolder that is labeled with your name.

This is what is needed as a minimum in your final project:

- 4 Dusk Images
- 6 Free Transform at least 4 must be done in CS5 or 6.
- 4 HDR (not more than 10 HDR)
- 1 B&W (not more than 5 B&W)
- 1 Tungsten
- 5 Daylight
- 1 Panorama w 3 or more images (not more than 2 panoramas)

4 - A maximum of 4 images over processed in HDR or in the LR Develop Module **Key wording** on all images must include: architect/location/building name and date built.

In the **Caption** box area in metadata note each of the criteria your image has from the above list (Ex. HDR, LR FT, CS6 FT, Day, Tung, Dusk, Pano, B&W)

Prints: Make one B&W and one color print. Minimum size is 13x19.

One print may be from a location other than your final project. If you elect to do this make certain you are choosing an exceptional image and also place in an additional subfolder.

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# **FIELD TRIPS**

# 4x5 shoot one #1 – (8AM-Noon) October 13

# On Campus

We spend four hours practicing our skills on the 4x5 camera. We utilize shifts, tilts, swings and the rise mechanism to create perfectly straight images of architecture. We brake into groups of 3-4. The students are allowed to discover the images they wish to take and then instruction is added to help achieve their shots. They have to deal with available lighting and determine proper exposures for sun, shade or open shade. Given this is a public area they must also learn to contend with the surrounding environment full of people and vendors.

# Field trip 4x5 Shoot #2 – (Sat or Sunday from 3-8pm)

### Private residence or commercial site.

We explore capturing an architecturally significant home or commercial space. All types of professional lighting are discussed. Then with minimal lighting we work at creating an amazing dusk image merging daylight, available light (built in) and a few additional added lights. Students decide on angles and exposure. Demonstrations on lighting techniques are presented and explored.

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# Helpful Info

DPREVIEW.com for all camera comparisons

High Dynamic Range - Photomatix Pro: http://www.hdrsoft.com/

#### Tutorials on Photoshop:

http://russellbrown.com/tips\_tech.html

#### Memory Cards,

Bigger is not better- would not shoot one continuous roll of film- stuff happens 4 Gigs is good if you have a 23mp camera maybe 8 gigs or for video 16 or 32. Change cards every so often... retire them or for back up. Just like a hard drive. It will break at some point Don't get to that point.

Never shoot near the end or erase at end to add more. Always format every time to ensure correct file structure. Speed is dependent on controllers in card and your camera matching.

**ISO-** higher the more noise (electronic error) you can fix it but much better to prevent it. Always set to no higher than is necessary. We shoot architecture on a tripod so the ISO can be low most of the time (ISO 100).

**Histograms**- correct exposure is vey important. Though digital is more like negative film better leeway and error toward overexposure.

There is no such thing as a perfect histogram. We need to interpret the histogram to what you are shooting. If your scene is all black and white your histogram would look like a goal post.

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Т

Command + F

Command + K

Command + Option + Up Arrow

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	Library	Shortcuts
View Shortcuts		Photo Shor
Esc	Return to previous view	Command + Shit
Return	Enter Loupe or 1:1 view	Command + Shit
G	Enter Grid Mode	Command + [
E	Enter Loupe view	Command + ]
с	Enter Compare mode	Command + E
N	Enter Survey mode	Command + S
Command + Return	Enter Impromptu Slideshow mode	Command + -
F	Cycle to next Screen Mode	Command + =
Command + Option + F	Return to Normal Screen Mode	Z
L	Cycle through Lights Out modes	Command + G
Command + J	Grid View Options	Command + Shit
L	Cycle Grid Views	Command + R
X	Hide/Show the Filter Bar	Delete

Set ratings

Set color labels

Reset ratings to none Decrease the rating Increase the rating

Set ratings and move to next photo

Set color labels and move to next photo

Command + Shift + I	Import photos
Command + Shift + E	Export photos
Command + [	Rotate left
Command + ]	Rotate right
Command + E	Edit in Photoshop
Command + S	Save Metadata to File
Command + -	Zoom out
Command + =	Zoom in
Z	Zoom to 100%
Command + G	Stack photos
Command + Shift + G	Unstack photos
Command + R	Reveal in Finder
Delete	Remove from Library
F2	Rename File
Command + Shift + C	Copy Develop Settings
Command + Shift + V	Paste Develop Settings
Command + Left Arrow	Previous selected photo
Command + Right Arrow	Next selected photo
Command + L	Enable/Disable Library Filters
Panel Shortcuts	
Tab	Hide/Show the side panels
Shift + Tab	Hide/Show all the panels

Hide/Show the toolbar

Activate the search field

Activate the keyword entry field

Return to the previous module

#### **Flagging Shortcuts**

**Rating Shortcuts** 

1-5

6-9

0

Shift + 1-5

Shift + 6-9

	Toggle Flagged Status	
Command + Up Arrow	Increase Flag Status	
Command + Down Arrow	Decrease Flag Status	1

#### **Target Collection Shortcuts**

В	Add to Target Collection	
Command + B	Show Target Collection	
Command + Shift + B	Clear Quick Collection	

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#### **Develop Shortcuts**

Edit Shortcuts	
Command + U	Auto Tone
V	Convert to Black and White
Command + Shift + U	Auto White Balance
Command + E	Edit in Photoshop
Command + N	New Snapshot
Command + '	Create Virtual Copy
Command + [	Rotate left
Command + ]	Rotate right
1-5	Set Ratings
Shift + 1-5	Set ratings and move to next photo
6-9	Set color labels
Shift + 6-9	Set color labels and move to next photo
Command + Shift + C	Copy Develop Settings A dialog will come up asking which settings to copy.
Command + Shift + V	Paste Develop Settings
Output Shortcuts	
Command + Return	Enter Impromptu Slideshow mode Shows the current selected photos in a slideshow based on the current Slideshow module settings.
Command + P	Print selected photos
Command + Shift + P	Page Setup
Navigation Shortcuts	
Command + Left Arrow	Previous Photo
Command + Right Arrow	Next Photo

#### **View Shortcuts**

Tab	Hide side panels
Shift + Tab	Hide all panels
Т	Hide/Show toolbar
F	Cycle screen modes
Command + Option + F	Go to normal screen mode
L	Cycle Lights Out modes
Command + Shift + L	Go to Lights Dim mode
Command + Option + Up Arrow	Go to previous module
Command + I	Show/Hide Info Overlay
1	Cycle Info Overlay
Command + J	Develop View Options

#### **Mode Shortcuts**

R	Enter Crop Mode
Q	Enter Spot Removal Mode
M	Enter Graduated Filter Mode
К	Enter Adjustment Brush Mode
D	Loupe View
Y	View Before and After left and right
Option + Y	View Before and After up and down

#### **Target Collection Shortcuts**

В	Add to Target Collection	
Command + B	Show Target Collection	
Command + Shift + B	Clear Quick Collection	