

Massachusetts College of Art

The Beginning Digital Photographer – NC422

Fall 2010 (rev. 9/10/10)

Instructor: Camilo Ramirez
Email: camilo.ramirez@massart.edu

Class Meetings:

Class meets on Saturdays in Room K-625 of the Kennedy Building :
(9/11/10) 9:00 a.m. – 1:30 p.m.
(9/18/10) 9:00 a.m. – 1:30 p.m.

Course Description:

This class will allow you to take control over your photographs by teaching the basics of the digital camera. We will explore effective techniques for taking better pictures with the most automated of digital cameras to the latest digital SLR's. In addition we will look at options for editing images ranging from Adobe Photoshop to iPhoto. You will gain an understanding of resolution, basic retouching techniques, a familiarity with file handling and a greater appreciation for the aesthetics of your photography.

Course Materials:

Required:

- An email address
- A charged digital camera with all cables, and memory card
- Any form of portable media that you can use to easily store and retrieve your work

Recommended:

- Your camera's operating manual
- A tripod of any kind (if your camera can be mounted on one)
- A card-reader
- Photo Editing Software (such as iPhoto, Photoshop, etc.) on a computer of your own
- Inkjet Photo Paper (preferably Epson brand)

Course Schedule:

- 9/11 Introduction to the course
Review course outline
Introductions
Digital vs Analog (Megapixels, SLR's, sensors, file types)
Basics of Photography (Shutter Speed, Aperture, Focusing, Macro, Flash)
Manual Camera Operation (M, A, S, P, Auto, ISO, White bal. histograms)
On site shooting practice & assignment worksheet
- 9/18 Image Capturing and File management
Editing with Bridge (discussion of other software options)
RAW Processing
Basics of Retouching and color correction with Photoshop
On-site color correction of edited images
Image resolution/resizing
Sharpening
Printing Services & Websites
Color Management, File versioning and high-quality output for Web & Print
Printing to Inkjet printers (media and ink choices)
On site image processing & print practice
Question/Answer session
Course Evaluation

Resources:

Photography Equipment & Supply Vendors:

- E.P. Levine
www.cameras.com *Levine's has an extensive inventory and is a pro shop. They have a knowledgeable staff. It is, however, a bit difficult to get to without a car, although you can get there on public transportation via the Silver Line.*
- Calumet Photographic
65 Bent Street Cambridge, MA 02141 617-576-2600 www.calumetphoto.com *Calumet is another pro shop with good inventory. They are close to the Cambridge Galleria mall and T accessible.*
- Hunt's Photo/Video
520 Commonwealth Avenue Boston, MA 02215 617-778-2222 www.huntsphotoandvideo.com *Hunt's in Kenmore Square is a small store, but they do have decent inventory. It is more of a consumer store than a pro store. It is easily accessible via the T. They also have several other locations.*
Online Vendors
- Inkjet Art
www.inkjetart.com
Inkjet Art is an excellent source for archival inkjet printing – hardware, software and extensive collection of papers. Additionally, this is a great resource for information on archival inkjet printing.
- B & H Photo, Video, Audio
www.bhphotovideo.com
B & H is one of the best sources for gear. They have excellent prices, extensive inventory and quick shipping.

Online Display/Galleries:

- Flickr (Flickr.com)
- Sports Shooter (sportsshooter.com)
- American Photography Museum (photographymuseum.com)
- Editorial Photographers (editorialphoto.com)
- PhotoArts (photoarts.com)
- Pixel Press (pixelpress.org)

Trade Publications:

- Aperture (aperture.org)
- Art on Paper (artonpaper.com)
- Black and White Photography (bandwmag.com)
- Blind Spot (blindspot.com)
- Digital Photography and Imaging (digitalphoto.com)
- Lens Work (lenswork.com)
- Photo District News (pdnonline.com)
- Photograph Magazine (photographmag.com)
- Photo Techniques (phototechniques.com)

Online Info & Organizations / Equipment Reviews / Tutorials & Education

- DP&I (dpandi.com) digital printing, Harald Johnson's site (author of *Mastering Digital Printing*)
- Digital Photography Review (dpreview.com) reviews of digital cameras, links to other resources
- Creative Commons (creativecommons.org) Shared licensing of media,
- Free Culture (free-culture.cc) Lawrence Lessig's site on digital media and copyright issues
- Steve's Digicams (steves-digicams.com) Digital camera reviews
- photoshopTV.com the "Photoshop Guys" tutorials, video podcast
- adobeevangelists.com Adobe enthusiasts, tutorials for all adobe products including Photoshop

Manual Camera Operation Flight-Check:

1. Choose the File Type, Resolution and Quality Settings for your camera
 - a. Choose RAW if you have the Option
 - b. If not then select TIFF or JPG High Quality
2. Set the ISO for the correct lighting situation
 - a. lower numbers such as 100 for lower sensitivity, but less noisy images
 - b. higher number such as 400 and 800 for higher sensitivity, more stopping power
3. Set the White Balance for the lighting condition
 - a. Use one of the Presets, or
 - b. Make a custom WB for this particular light

4. Compose your shot, manually adjust exposure, focus you shot
 - a. Take a light reading for the current lighting situation
 - b. Make adjustments to Shutter Speed and Aperture to find the proper exposure.
Be aware that many cameras work with 1/3 stops which are in-between these:

Standard F-Stops	f2									
Shutter Speeds										

- c. Use the focus points on the camera and the “half-press” pre-focus technique or use manual focus.
5. Optional Changes
 - a. Turn your flash on or off
 - b. Turn the macro option on or off
 - c. Turn the self-timer option on or off
6. Shoot and review
 - a. Review the image for composition.
 - b. If you have the option, check the histogram for the image

Shooting Assignment:

For this assignment, shoot a series of pictures taking the time with each picture to manually set the correct ISO, White Balance, Shutter Speed, Aperture, Flash setting, Macro setting & Focus. Each time you take a picture, write down the time of the picture, what you shot, and what the light sources around you looked like (i.e. Indoor fluorescent, outside-overcast, warm-sunset, /Mixed incandescent streetlamp with flash, etc.)

In addition, shoot each image as a bracket of 3 pictures with a difference of 1-stop.

Example: If your shutter speed was fixed at 1/125 sec., your apertures might be f4, f5.6, f.8

OR If your aperture was fixed at f5.6, your shutter speeds might be 1/60, 1/125, 1/250

Each of the 3 frames for each bracket should be shot at the sam time in the same light and using the same viewing angle. The you should only vary the shutter speed **OR** aperture.

This means that for each picture you want to take, you’ll actually end up with 3. If you have a tripod, use it since it will help steady and repeat the same frame 3 times. Otherwise do your best to hand-hold the frame as best you can. You are required to shoot a minimum of 12 brackets, but you should try your best to take more.

Remember that your goal here is quality not quantity. Also remember to have fun with your shots and be creative. Find interesting camera angles or lighting conditions and take your time to compose a frame. A tripod can also be useful to slow you down and let you “see”.

Shooting Log

***Watch out for those 1/3 stops!**

Bracket #	Subject	Time of Day	Lighting Conditions	Bracket Exposure Combinations*		
				Underexposed f-stop/shutter	Correct Exposure f-stop/shutter	Overexposed f-stop/shutter
1				/	/	/
2				/	/	/
3				/	/	/
4				/	/	/
5				/	/	/
6				/	/	/
7				/	/	/
8				/	/	/
9				/	/	/
10				/	/	/
11				/	/	/
12				/	/	/
13				/	/	/
14				/	/	/
15				/	/	/
16				/	/	/
17				/	/	/
18				/	/	/
19				/	/	/
20				/	/	/
21				/	/	/
22				/	/	/
23				/	/	/
24				/	/	/