

Digital Photography for Beginners

Objectives:

- Learn what a digital photo is.
- Learn what features to look for in a digital camera.
- Learn how to transfer photos from a camera to your PC.
- Learn how to view photos on your computer.
- Learn basic photo editing techniques.
- Learn how to prepare a photo for email.
- Learn about photo printing and online photo sharing.



Digital Photography For Beginners Student Handout and Resource Guide

What to look for when buying a camera?

- How many megapixels? For email, internet viewing, or small prints, 3-5 megapixels is fine. If you plan to make very large prints, then you might need more megapixels. See chart below (under Printing) for details on pixel requirements for various sizes of prints.
- Size and shape. Does the camera fit your hands and feel comfortable?
- Does it have an optical viewfinder? This is sometimes helpful because in bright light it may be difficult to see the image on an LCD screen.
- Optical zoom. 3X zoom is useful. Camera should be mounted on a tripod to use zoom greater than 3X without getting a blurred image (unless camera has built-in image stabilization).
- “Digital zoom” is not useful. Using digital zoom enlarges the image electronically, but it makes the picture look fuzzy. It is better to keep digital zoom turned off and crop the photo yourself using your photo editing software.
- Battery type. Digital cameras use up battery power quickly, especially if the flash is used extensively. So it is most economical to use rechargeable batteries. Lithium-Ion batteries have best performance. Nickel Metal Hydride batteries are second best. Nickel-Cadmium batteries are not recommended because they lose their charge quickly and they have a limited lifetime. The use of size AA batteries can be handy, since you can buy extra non-rechargeable batteries most anywhere if needed.
- Type of flash memory card. Many different types and sizes available. All work similarly. The camera will typically come with a small capacity memory card, but you will probably want to buy a bigger one right away.
- Read technical reviews of cameras to find out how well a camera performs. A list of internet websites giving reviews is located below.

Photo Album and Editing Programs

Most digital cameras come with software for downloading your photos from the camera to the computer, plus a free photo album and editing program. You might also get a photo editing program free with your computer, or with a printer or scanner. In addition,

there are photo viewing and editing programs that you can buy in stores or download from the internet. (See list below).

To see what photo programs are already installed on your computer, open My Computer and get to a folder that has at least one photo in it. Right-Click on a photo; then Left-Click on "Open With". You will see a list of all the photo programs on your computer. Left-Click on a program to open it.

Some popular photo programs available for purchase or download are:

Adobe Photoshop Elements 4	\$100
Corel Paint Shop Pro X	\$100
Ulead Photo Impact	\$100
ACDSee 8	\$50
Ulead Photo Express	\$20
Picasa2	Free (Download from Google.com)
Microsoft Office Picture Manager	Included as part of Office

If your computer has Microsoft Office installed, then you can open its photo editing program by clicking on START → Programs → Microsoft Office → Microsoft Office Tools → Microsoft Office Picture Manager.

Photo Sizes for Viewing on a Computer Monitor

For a computer monitor, image sizes needed are less than 1 megapixel.

Image Size on Computer Monitor		
Approx Image Size on Screen - Inches	Height x Width - Pixels	Megapixels
Full Screen	768 x 1024	0.79
5 x 7	360 x 504	0.18
3 x 4	216 x 288	0.06

Photo Sizes for Prints

High-quality prints typically require an image resolution of 200 pixels per inch or more. This chart shows the megapixels needed for popular size prints.

Printed Images at 200 dpi		
Print Size - Inches	Height x Width - Pixels	Megapixels
3.5 x 5	700 x 1000	0.7
4 x 6	800 x 1200	1.0
5 x 7	1000 x 1400	1.4
8 x 10	1600 x 2000	3.2
11 x 13	2200 x 3400	7.5
13 x 19	2600 x 3800	9.9

Online Photo sharing

Various services allow you to store your photos on the internet and allow your friends to view them or even order prints. Some of these services include:

Kodak Easy Share Gallery -- www.kodakgallery.com

Snapfish -- www.snapfish.com

Smugmug -- www.smugmug.com

Shutterfly -- www.shutterfly.com

Flickr -- www.flickr.com

Library Resources

Check out the library's books on digital photography:

Digital Photography: 778.3

Digital Photo Editing: 006.6869

Online Reference Resources

Consumers Reports online: www.consumerreports.org

Digital Camera Reviews: www.digitalcamera-hq.com

Digital Photography Review: www.dpreview.com

Steve's Digicams: www.steves-digicams.com

Digital Camera Resource Page: www.dcresource.com

Imaging Resource: www.imaging-resource.com

AARP Learning & Technology pages: www.aarp.org/learntech

PC World online magazine: www.pcworld.com