Suggested lesson plans for teaching digital photography

Here is a suggested learning sequence for teaching digital photography workshops. Students will learn the basic concepts of digital photography and apply their knowledge through practical activities.

The learning sequence is:
1. Basic functions of the digital camera
2. Basic occupational health and safety practices
3. Photographic composition
4. Uploading and saving basic image files
5. Editing photographs
6. Creating a Photostory
7. Saving images for the web and email photographic attachments

Introducing the basic functions of the digital camera

Aim: introduce the functions of the digital camera

Notes: It is a good idea for students to get into pairs for these exercises. They can use each other as the main subject for their photographs. Everyone loves to see photographs of themselves! This helps keep the students engaged and enjoy the practical activities.

Method:
Using a flash
1. In pairs, students take a portrait of each other in low lighting conditions without using a flash.
2. Students re-take the same photograph but mounting the camera on a tripod if available.
3. Students re-take the same photograph using the automatic flash function.
4. Compare and discuss the results.

Image size
Demonstrate the image size function on the digital camera
In pairs, students demonstrate to each other which function they would use for
1. A large resolution photograph
2. A small resolution photograph that could be uploaded to the Internet.

Backlighting
1. Students place their partner against a brightly light window.
2. They take a photograph.
3. The photographer now swaps places with their partner and ensures that their own back is facing the brightly light window.
4. They take another photograph.
5. In pairs or as a class, compare the results of the two photographs and discuss exposure and backlighting issues.

Teaching OHS
Aim: OHS stands for occupational health and safety. It is a good idea to run students through the safety practices of handling batteries to avoid any dangers with mishandling batteries.
Method:
1. Explain the best practice of working with batteries.
2. Students could answer multiple-choice questions to assess their learning.

Teaching photographic composition
Aim: Students learn the basic principles of composing a good photograph.
Method:
1. Select and study good examples of well-composed photographs together as a group. Cover examples of rule of thirds, high and low angle photographs, close-ups, frame with in a frame, using diagonal lines to create perspective, cropping, light and shadow and visual balance.
2. As a group look at fresh examples of photographs. You may like to choose a group of photographs from http://flickr.com/. Ask members of the group if they think the photograph displays good or bad composition and discuss. Try and refer back to the basic rules of composition in your discussions.
3. Send the group out on a practical exercise. They must take 2 examples of the following types of photographs: A frame within a frame, a landscape photograph that uses the rule of thirds in a horizontal and vertical composition, a photograph that shows deep perspective, a closely cropped composition, a high angle photograph, a low angle photograph and a symmetrical composition.
4. Come back together as a group.
5. Demonstrate how to upload the photographs to a personal folder on the computer.
6. Students upload their own photographs to a personal folder.
7. Students present their photographs to the group. They give each other feedback. Use a data projector to display the photographs if possible as it keeps the whole group engaged.

Uploading photographs to the computer
Aim: Students learn how to transfer the images they have taken to the computer
Method:
1. After students have taken photos, they attach their camera to the computer with the supplied USB cable.
2. The generic Microsoft Camera and Scanner wizard should automatically come up.
3. Students select the images they want to upload.
4. Students choose or create a folder on the computer to save the images in (usually in My Pictures folder).
5. Student save the photos with their name or initials so that the images are easily found and identified as theirs.
6. The images are uploaded.
Editing photographs
Aim: Students learn how to edit photographs using GIMP or image editing software available.
Method:
1. Show examples of edited photographs. Look at good examples of adjusting brightness and contrast, changing colours, cropping and resizing and adding filters to photographs. Find examples at websites such as http://flickr.com/ or https://www.photoshop.com/ or Google image editing to find other sites.
2. Use a data projector to demonstrate the use of an image editing software such as Gimp or Photoshop Elements.
3. Students choose one of their own photographs from the composition exercise.
4. Demonstrate how to open and save a photograph. Students then do this themselves.
5. Demonstrate how to adjust the colours in the photograph. Students then do this themselves.
6. Demonstrate how to crop a photograph. Students then do this themselves.
7. Demonstrate how to adjust brightness and contrast. Students then do this themselves.
8. Demonstrate how to apply a basic filter. Students then do this themselves.
9. Demonstrate how to save the final photograph. Students then do this themselves.
10. If a printer is available, demonstrate how to send an image to the printer.
11. Students then select their best-edited photograph and make a print using the correct printing settings.

Making a Photostory
Aim: The aim of this workshop is to get students to consolidate their learning and build upon their current skills.
Students should now have a good understanding of the basic functions of the camera. They should be able to take well-composed photographs and they should be able to apply basic image editing skills.
Method:
Use the Photostory demonstration from the Power Up website to teach the steps in creating a digital story.

Saving for the web
Aim: To demonstrate how to resize a photograph for the web.
Method:
1. Demonstrate how students can resize an image for a website or email.
2. Students select one of the photographs from the composition exercise.
3. Students resize the photograph using the chosen software.
4. Students then email each other or a friend the resized photograph.
5. They open their emails and check that the image was sent.
Further suggestions for practical activities

Creating a blog
If students are familiar with blogging, they may like to select their own topic for a blog. They could write about their chosen topic and take photographs for their blog.

Making a video
If students are experienced in video production, they could create a documentary project that includes the use of photographic stills.

Designing an exhibition
Students could set a topic for a photographic exhibition in their community. As a group they should take and select the best photographs, create an invitation, organize a venue, print, frame and sell their works.

Create a book
Students may like to use free software such as http://www.smilebox.com/photo-books/ to create their own photographic book.

Create a website
Students with basic web building skills may like to create a website of their favourite photographs

Create a Facebook account. Students go to http://www.facebook.com/home.php and create a portfolio for themselves. They can create online albums for their best photographs

Upload photographs to Flickr
Students upload their best images to http://flickr.com/

Links for teaching digital photography
http://www.adobe.com/education/instruction/adsc/
http://tlc.ousd.k12.ca.us/~acody/digi8.html