Photoshop is the industry-standard software for image-editing, providing a range of powerful tools. Instructions in these notes cover version CS, but will broadly apply to versions 5.0 - 7.0 in addition.

This document is recommended for advanced users, or those who have already completed document 9.73 – Image Editing with Photoshop CS.

If you are not attending a ITS workshop, you will need to have the course “IT Skills” added to your WebCT login – please contact ITS reception.

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1 Login to WebCT

Objectives To login to WebCT

Comments Use your ITS username and password

Activity 1.1 Login to WebCT

In following this document, you should leave Internet Explorer – logged into WebCT – and Photoshop open, and switch between the two using the icons at the bottom of the screen.

- Open Internet Explorer – the easiest access is provided by the icon to the right of the Start button

- If Internet Explorer opens at the ITS home page, you will see a link to WebCT at the bottom of the page

- Either follow that link, or type webct.bbk.ac.uk directly into the address bar

- Use your ITS username and password to login

Activity 1.2 Open IT Skills

- Click on the link to the course materials for "IT Skills"
- Click on Software Guides

Within this area are two links to image databases; Photoshop#1 and Photoshop#2. You will be prompted as to which to use.
2 Drawing tools

Objectives  To draw shapes within Photoshop

Activity 2.1  Brush and Pencil

There are several ways of adding shapes to your images within Photoshop.

Most simply, you may use the Brush or Pencil tool to draw a line onto your canvas.

![Figure 2-1](image1)

With both of these tools, you may change the brush size using the options bar below the menus.

Activity 2.2  Rectangle, Ellipse

Further down the toolbar is the rectangle tool, which hides several other shapes.

Select a shape and click and drag to add that shape.

![Figure 2-2](image2)

All of these shapes have further options you may set – note particularly those on the drop down menu shown in Figure 2-3, allowing you to constrain the shape to a circle, square etc.

![Figure 2-3](image3)

The colour of these shapes should also be set on the option bar, as shown below
Activity 2.3  Controlling the size of the line

You may have noticed, however, that when using the tools above, there is no option to change how thick the line is. To draw an unfilled shape and set the size of the line, you should use one of the marquee tools.

- Create a new, blank canvas by choosing **File – New**
- Set the width to 15cm and height to 10cm
- Add a new layer, using the layers window

Note: It is not always necessary to add a new layer when drawing a new shape, but is good practice, as it allows you to move that shape independently, set blending options and so on.

- Use the rectangular marquee tool to draw a shape onto the new layer
- Choose **Edit – Stroke**

  Type a number to set the weight of the line

  Click to change the colour of the line
Activity 2.4  Cartoon Style

This tool may be used to add a quick cartoon effect to a picture.

- Open the image frog.jpg from your n: drive (if you need to download it, it is in WebCT, under IT Skills – Software Guides – Photoshop – Sample Images – Photoshop #1)

- Take a duplicate of the image

- Use the magic wand with tolerance set to 120 – to select the frog

- Hold the SHIFT key and click once on the frog’s eye to add that to the selection

- Choose Edit - Stroke

- Set the width to 4 and choose a fairly dark colour

![Stroke dialog box](image)

Figure 2-7

- Click OK

The frog is still selected, and may be copied and pasted onto another image.
3 Retouching tools

Objectives To use Photoshop’s retouching tools

Method Use the Blur, Sharpen and Retouch tools

Comments Remember always to make a new snapshot before using retouching tools; partly so that you can revert if you make changes you do not want to keep, and partly to allow a quick “before” and “after” comparison.

Activity 3.1 All three tools are accessible from the icon shown in Figure 3-1 – click and hold to see the options.

- Use the shortcut, $R$, to change to the last-used tool
- Use $SHIFT+R$ to cycle between the three

All are fairly self-explanatory in their effects.

![Figure 3-1](image)

Each tool has, at the top of the screen, a mode and strength setting, as shown in Figure 3-2 and Figure 3-3 respectively

![Figure 3-2](image)

![Figure 3-3](image)

Activity 3.2 The Sharpen Tool

The sharpen tool needs the most care of the three, as it is possible to make a complete mess very quickly. It is used to increase colour contrast in the areas on which you paint it.

- If necessary, save a copy of frog.jpg from Photoshop #1 into your n:\my pictures folder
- Open your copy of frog.jpg
• Duplicate the image (**Image - duplicate** on the menus)

• Choose the Sharpen Tool from the toolbar

• From the options at the top of the screen, choose a strength of 11% and a large brush size, as in Figure 3-4

• Paint over the frog’s head to sharpen the eye

• The change is slight, but the history panel will allow you to see what has been done

![Figure 3-4](image)

If you want, try painting over the image with a higher pressure setting to see how damaging the sharpen tool can be – use the history panel to reverse any changes you don’t want

**Activity 3.3  Sharpen Filter**

You may not need to use the sharpen tool, as there are filters available to serve a similar function.

• Open frog.jpg

• Take a duplicate of the image (Image – Duplicate)

• Select the magic wand

• Change the tolerance to 75

• Holding down the **SHIFT** key, click into the main portion of the eye a few times, till most of it is selected

• Use the Sharpen Filter by choosing **Filter - Sharpen - Sharpen**
Activity 3.4  The Blur Tool

The blur tool is most useful for covering up small blemishes, wrinkles etc on faces. Usage takes practice more than instruction, but to see the effect.

- In WebCT, open the full size version of redeye.jpg (click on the View Image link) from Photoshop #1 and save a copy to your n: drive
- Open the file redeye.jpg
- Take a copy and close the original
- Select the magic wand tool
- Change the tolerance (on the options panel) to 50
- Click once on the forehead of the left-hand person
- Hold down the SHIFT key and click just to the left of the selected area

You should now have most of the face selected, which protects the hairline

- Zoom in closer to the image – roll the mouse wheel down or use one of the techniques we have already covered
- Select the blur tool, as in Figure 3-1
- Change the strength (if necessary) to 50%
- Paint over the forehead – you may paint over the hairline with impunity, as it is outside the selected area
- Note that the more you cover an area, the greater the effect
- Zoom out again to see the effect – a little over the top, perhaps, but effective

The blur tool needs care in use, but applied sparingly it can be very useful in giving the required effect.

Activity 3.5  The Smudge Tool

The smudge tool is similar in effect to the blur tool, but allows you to “smudge” paint from one area to another. Its effects are often even more obvious than the blur tool, so usage needs still more care.

- Choose one of the marquee tools and click once, anywhere on the image to deselect the area first chosen
- Zoom in to the person in the middle at about 150%. He has a couple of blemishes just below his mouth that we will remove
- Choose the smudge tool
- Change the pressure (if necessary) to 50%
• Click just to the side of one of the blemishes and paint over it

Again, a quick and effective way of touching up a photograph, but be careful not to overdo it.

Activity 3.6 The Sponge Tool

The sponge tool saturates or desaturates the pixels wherever you paint. Saturation intensifies colours, desaturation dulls them – ultimately turning them grey. In its desaturation mode, it can be used to remove red-eye.

Figure 3-5

• Open the image redeye.jpg
• Choose Image – Duplicate
• Close the original

• Select the sponge tool

• Check that the mode is set to Desaturate, and the brush size is small – 3 or 1 – as in Figure 3-6

Figure 3-6

• Use the zoom tool or mouse wheel to magnify the pupils – remember that holding down SPACE turns the cursor temporarily into the hand tool, allowing you to change which part of the picture is displayed
• Click accurately on the pupil until the desired level of red eye fix has been achieved.
4 Using Burn to minimise shadows

Objectives To use Photoshop’s retouching tools

Method Use dodge and burn

Activity 4.1 Burn

- In WebCT, click on the Sample Images link, as shown in Figure 4-1, to go back to the list of image databases

![Figure 4-1](image1.png)

- Click on Photoshop #2
- Open the full size version of girl.jpg and save a copy to your n: drive
- In Photoshop, open the file you have just saved
- Select the Burn tool

![Figure 4-2](image2.png)

- Use the toolbar to select a large brush size (c.20)
- Change the exposure to a low number – around 7%
- Use sweeps of the mouse to draw carefully over the bright areas on her nose and cheeks

Note that each click of the mouse applies the effect again – so two short sweeps have double the intensity of one long one.

If you overdo it, you may correct the effect. Try some or all of the following;

- Use the history panel to undo your changes
- Use the history brush, varying the opacity to erase only some of your edit
- Use the dodge tool to lighten the area
5 Recolour a photograph

Objectives To recolour a washed-out photo

Method Use curve and sponge

Activity 5.1 The Curve Function

- In WebCT, click on the Sample Images link
- Click on Photoshop #2
- Open the full size version of boys.jpg and save a copy to your N: drive

The photo is washed out. Photoshop’s curve function allows you to adjust the tonal range of a photograph or other image, adjusting highlights, shadows and midtones.

- Choose **Image - Adjustments - Curves** (CTRL + M)

![Curves dialog box](image)

- Click and drag the middle box down and to the right a little – just enough to make the line curve a little. You should see the picture darken
It is possible to click anywhere onto the curve to make adjustments. We will make the darker tones a little darker as well.

- Click onto the curve near the bottom left
- Click and drag it down and right to make a J curve similar to that on the right
- Click OK

![Figure 5-2](image)

The picture is already brightened up considerably. We can use the sponge tool to enhance the colour of the jacket on the right of the picture.

- Select the sponge tool

![Figure 5-3](image)

- Use the toolbar to choose a large brush (between 20 and 30) size
- Set the mode to saturate
- Change the pressure to 40%

![Figure 5-4](image)

- Paint over the coat on the right hand side – remember to avoid repeated clicks of the mouse; use a sweeping motion

The denim we can leave faded, but you could use the same tool – possibly with a smaller brush size – on the badges on the denim jacket.

When finished, use the History panel to create a new snapshot (the middle icon). You may then switch between the original and new snapshots to see the difference.
Activity 5.2  Whilst there is a certain satisfaction – and fine control – in adjusting a photo in this way, you may achieve something similar more quickly by using Photoshop’s levels command.

- Open the original boys.jpg again
- Right-click in the title and choose Duplicate to take a copy
- Close the original
- Choose **Image - Adjustments - Auto levels**

That may give just the effect you want – you may still use other tools to correct colours etc. For more control over this effect, use the layers panel

- Click on the snapshot of the original picture in the history panel to reverse the changes made above
- In the layers panel, drag the background layer onto the new layer icon (to the left of the dustbin) to duplicate it (or right-click and choose duplicate layer)

- Use the drop-down to set the blend mode to soft light

![Figure 5-5](image1)

- Use the opacity setting to reduce the effect
- Repeat the above to increase the effect

![Figure 5-6](image2)

Note that this method, changing the blend mode to Screen, will also work for under exposed (too dark) photographs

In Photoshop CS, you may also use **Image - Adjustments - Shadow/Highlight** – use the sliders to alter the severity of the effect
6 Retouch a photograph

Objectives To use Photoshop’s retouching tools to whiten teeth and “improve” a face...

Method Use clone, blur, dodge and burn

Activity 6.1 Whiten Teeth

• In WebCT, open the full size version of smile.jpg and save a copy on your N: drive
• In Photoshop, open the image you have just saved
• Right-click in the title bar and choose duplicate to take a copy
• Close the original photograph

There are various things to “correct” here. First, the teeth

• Use the lasso tool to draw round the teeth – the aim is to protect the lips and gums
• Select the dodge tool
• Use the toolbar to set the range to midtones and the exposure to c. 20%

Figure 6-1

• Paint over the teeth to whiten them!

Activity 6.2 Next, we will remove the shadows from under her eyes

• Select the clone stamp tool
• Hold down ALT and click just under a shadow to select the source to clone from
• Set the mode to lighten and the opacity to c. 35%

Figure 6-2

• Click and drag over the shadow to blend it away

Be careful of the eye on the left, as the lashes are indistinct and easily removed

• Select the blur tool
Set the mode to lighten, with a heavy pressure, to remove the few dark spots from her face and, if necessary, further to blend in the effect achieved with the clone stamp.

Activity 6.3

Finally, we can remove the white fleck from her hair and darken her temple.

- Use the clone stamp – in normal mode, with a small brush size - to clone hair and paint it over the white fleck.
- Use the burn tool with a low exposure (<10%) and the range set to midtones to darken the glare on her temple a little.
7 Tools and Shortcuts

**Comments**  For Reference

### Activity 7.1

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*Figure 7-1*

**Photoshop’s retouching tools – more exercises**
http://www.graphic-design.com/Photoshop/tutorials/0302-10.html

**Cosmetic Retouching**
http://graphicssoft.about.com/od/photoshoptutorialsretouch/

**Animation with Imageready**
http://graphicssoft.about.com/od/photoshoptutorialsanimation/

**Correcting Colour and Tone**
http://graphicssoft.about.com/od/photoshoptutorialscolorcor/

**Range of Tutorials**
http://www.good-tutorials.com/