

Exercises and guides for image editing and PDF



**Adobe Photoshop CS5
Adobe Acrobat 9 Pro.**



AARHUS SCHOOL OF BUSINESS
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Exercise 1 – Simple image editing

1. Start Photoshop and open the image from your personal drive and try out the different tools in PS e.g. the different options in the lower part of the menu *Filter*.
2. Try out the functions indicated below. If the last mentioned functions are irrelevant for your image, then try out the functions on the example pictures opposite the function.

Rotate

Image – Image Rotation – try out the different options.

Resize


Choose in the menu *Image – Image Size* – e.g. under Pixel Dimensions (e.g. percentage-wise alteration) or Document Size (cm).

You can change the resolution of the image in the Resolution field. If a picture is small when you print it, even though it looks fine on the screen, it's possible because that the resolution is very high, in contrast to the pictures physical size of the picture.


This applies to the following "rule of thumb" for image resolution:

Images for screen use	Between 72 and 96 ppi (pixel per inch)
Images for use in print in a newspaper	Between 85 and 150 ppi
Images for printing on a laser printer	150 ppi
Images for printing on an inkjet printer	Between 180 and 225 ppi
Images for use in print (offset-) printing company	300 ppi or more

Crop

Select the Crop Tool  from the Tool-palette.
Click and drag diagonally with the mouse over the image, and double-click in the marked area, when you have the segment you wish to keep.

Zoom

Select the Zoom Tool  from the Tool-palette
Zoom doesn't change the actual size. Hold down the ALT-key to zoom out again (- in the magnifying glass).

Brightness/Contrast (e.g.: chris)

If the scanned image is a little too dark, you can adjust the brightness and contrast under, *Adjustments* in the menu *Image, Brightness and Contrast* or *Shadow/Highlight*.

Right the scene (e.g.: chris)

If a scene is oblique you can right it by selecting the entire image *Select - All*. Next choose *Edit – Free Transform* and right the scene by moving the mouse out of the selection square, till the mouse changes its appearance to a bended arrow:

You can also hold down the CTRL/CMD-key and drag the corner markings to right the image. Finish by cropping the image (Crop Tool).

Filter

There are many different ways to transform pictures into artworks I Photoshop. Try one of the many filters on a picture of yourself or **Tiger.jpg**, e.g. *Filter – Liquify*.

3. When you are satisfied with the result, save in jpg-format and insert the image in a Word-document or PowerPoint-presentation.


Exercise 2 – Colour change, image extraction and merging of images

Open the images **water** and **rubberduck** from the exercise folder.


If your experience difficulties with seeing both images, then select from the menu *Window – Arrange – Float All in Windows*.

Zoom to 100% to better judge the dimensions between the two images. You can get the same zoom value on both images, by clicking on one of the images and then selecting from the menu *Window – Arrange – Match Zoom*.


An alternative is double-clicking the Zoom Tool 

1. Start by changing the colour of the rubber duck to e.g. green:
 - a. Select in the menu *Image – Adjustments – Replace Colour*.
 - b. Mark the button *Image* under the motif.
 - c. With the pipette (Eyedropper Tool) collect the most dominant yellow hue on the rubber duck.
 - d. Under the headline *Replace* you can select a substitute colour, by dragging the sliding bar in *Hue, Saturation* and *Lightness*.
 - e. Then select  (pipette with a +) and select the additional yellow shades, so all of the rubber duck turns green. Click OK.



2. Next you have to extract the rubber duck from the background:
 - a. Select the Magic Wand Tool  from the Tool-palette and set the Tolerance to 30 – a higher value, will select a larger colour area.
 - b. Click in the white area. Adjoining areas can be included in the marking by holding down the SHIFT-key and simultaneously clicking

with the Magic Wand in the area. If a too large area has been marked, you can exclude an area by holding down the ALT-key - e.g. if the white area in the rubber ducks eye has been marked.



- c. Select the Background Eraser Tool  and adjust the thickness and shape of the eraser. Erase the background – pay attention to missed spots in the check pattern that appears.

An alternative could be to select the Quick Selection Tool  or the Magic Eraser Tool .

3. Reduce the size of the image:

Image – Image Size – use the adjustments of the width in % of the original. Is the size not as wanted, select Undo from the *Edit* menu and try again.

4. Copy the rubber duck to another image:


- a. Select the Rectangular Marquee Tool  from the Tool-palette.
- b. Draw a square around the motif.
- c. Select in the menu *Edit – Copy*.
- d. Click the image named water and select *Edit – Paste*. The rubber duck is now placed in a new layer.
- e. Select the Move Tool  in the Tool-palette and move the rubber duck onto the person's right hand.

5. Click on the original rubber duck image and rotate it 180°.

6. Place the mirrored rubber duck onto the person's other hand in the water image, by repeating bullet point 4.

7. Alternatively you can paste the duck from bullet point 4 again (*Edit – Paste*), by which another layer with a duck is created. With the new layer selected choose *Edit – Transform – Flip Horizontal*. Move the duck with the Move Tool.

8. Use the Clone Stamp Tool from the Tool-palette to remove the shadow underneath the person's arm:



- a. Click on the background layer in the Layer-palette and select the Clone Stamp Tool .
- b. Hold down the ALT-key and click on the area of the sea, which should be cloned.
- c. Adjust the tools size and shape in the Properties-palette and paint the shade with the left-mouse-key held down – pay attention to the contour of the person.

It can be necessary to choose new cloning areas once in a while to remove all of the shadow.

9. Save the image in jpg-format.

Exercise 3 – Smoothing of sharp edges

Do a similar merging of images with the images **water** and **dune**:

1. Crop the water image till the background is only visible around the motif.
2. Mark the background with the Magic Wand Tool  or with the Quick Selection Tool . Adjust the Tolerance and Brush Diameter. (If you are using the Quick Selection Tool, then click the Refine Edge button). Erase the background.
3. Select in the menu *Select - Inverse*, to mark the person instead of the background.
4. Thin out the marking, so that there are no sharp edges around the motif, when the image is placed onto the **dune** image.

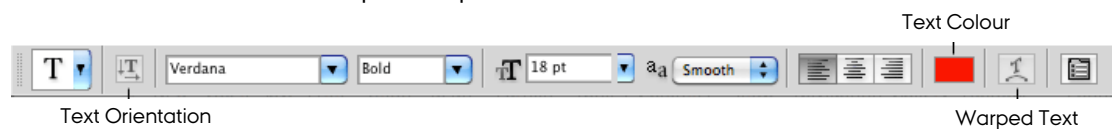
Select – still with the motif marked – in the menu *Select - Modify - Feather...* and set it to 5 pixels. (This could also be done in bullet point 2 – in the brackets).

5. Copy the selection and paste the motif onto the image **dune**. Select undo on both images if the thin out is too significant and try with other settings.
6. Place a tick in the box Anti-alias (Magic Wand Tool). Regarding the markings, you can in some situations, do the same smoothing of sharp edges.
7. Move the motif with the Move Tool to the desired position and copy it by holding down the ALT-key, while you are dragging. Place a number of identical persons in the dunes – notice that a new layer is created for each copy in the Layer-palette.
8. Save the image.

Exercise 4 – Text on images

It is possible to type text and applying different text effects on an image in PS. The text consists of pixels and will have the same dimensions as the image – when you zoom in you can see the letters pointed edges of the letters. Photoshop saves a vector based text outline, which is used when the image is scaled.

1. Open the desired image..
2. Select the Horizontal Type Tool from the Tool-palette and try the different text attributes on the Properties-palette.



3. Click (or drag to create a textbox) where you want the text to be placed, and type the desired text. Save the image.

Exercise 5 – Remove red eyes

1. Find an image on the Internet, where the people have red eyes (keyword redeye).
2. Open the image in Photoshop and zoom in on one of eyes of the person.

3. Select the Red Eye Tool  in the Tool-palette.



4. Click in the centre of the red pupil and PS will replace the red hue with a more natural black colour. If the result isn't as wanted, then you can adjust the pupil size and darkness degree in the Properties-palette.
5. Correct the other eye as well and save the image.


Exercise 6 – Working with layers

In this exercise you have to make a banner, that can be used for a website like the ones below.







You are going to be working with multiple layers in the image: a background layer, a motif layer, a “thinning” layer and a text layer. Use the Layer-palette, which should be visible in the PS-desktop.

Approach (e.g.: The Victory banner):

1. Create a new image in PS where you are going to be working with the banner (*File – New*).
The size of the banner should be e.g. 700 x 120 pixels and choose a white background colour. Choose an appropriate dimension for use on the Internet.
2. Next open the image that should be placed on the banner e.g. **troy** from the exercise folder or find another image on the Internet.
3. Now you have to select a new colour instead of the white in the banner. Click on the white image and select the Eyedropper Tool  in the Tool-palette and collect the desired colour from the other image (**troy**). The colour is now visible as the foreground-colour in the Tool-palette. You can also collect a background-colour, by clicking on the background-colour-field and collecting another colour from the motif image.

Later you will be able to switch between the two colours as a filling by holding down the CTRL/CMD-key + Backspace.

4. Fill the white image with the collected colour by selecting the Paint Bucket Tool  and clicking on the image or by using the method mentioned above.
5. Click on the image with the motif that should be a part of the banner (**troy**) and crop and reduce the size of the image.
6. Now the edges has to be erased around the part of the motif you want to place on the banner:

- a. Select the Rectangular Marquee Tool  and set the Feather value to 5+ pixels on the Properties-palette.
 - b. Draw a square around the part of the motif that is going to be placed on the banner.
 - c. Choose in the menu *Select - Inverse*.
 - d. On the Layer-palette select the icon for a new layer (see the arrow). The new layer will be named Layer 1.
 - e. Press - while Layer 1 is marked - the CTRL/CMD-key + Backspace or ALT + Backspace to choose the same transition-colour as you collected on the banner image. This can be done a multiple number of times to get more colour/a better transition of the edges.
 - f. Remove the marking (*Select - Deselect*).
 - g. Select both layers on the Layer-palette and drag with the mouse the unmarked layers to the banner image, so that the motif and transition is copied to the banner.
 - h. Select the Move Tool  and move the motif to the desired position.
7. Select the Type Tool  and draw a textbox. Choose a text font type, size and colour (in the **troy** example the font type Trajan Pro, 60 pt. and the background colour from the Tool-palette) and write the desired text. The text is placed in a new layer.
 8. When you are done, save the banner in both Photoshop-format (.psd), which saves your layers. Save another copy as jpg, so that the image can be used for websites.



Exercise 7 – Filters and layers

Continue working with the banner from “Exercise 6 – Working with layers”, in Photoshop-format. Try some different filters (e.g. Craquelure or something else). Remember to select the layer that is going to have the filter applied, e.g. the motif layer or the background layer.

Save the image with a different name.

Exercise 8 – Pop Art

By using the colour-change-method from “Exercise 2 – Colour change, image extraction and merging of images”, you can create a “Warhol-like” portrait – etc by repeating it a few times. Underneath is a copy of Warhol’s portrait of Marilyn Monroe, and another from a catalogue (www.prada.com).



Find a portrait and experiment with changing the colours of the face, hair, clothes etc.

Adobe Acrobat Pro 9 – PDF

Adobe Acrobat is a useful, comprehensive and large program. Besides making creation of PDF- files (Portable Document Format) possible, you can run a spell-check, open textiles like html, gif, bmp etc as PDF, provide your documents with a Digital Signature, passwords, saving your publications for printing and create presentations etc.

All kinds of documents can be converted into PDF in Acrobat, which makes sure that your documents keep their original appearance and content - that includes graphics, font types, formatting, hyperlinks etc. The PDF format is suitable for distribution via mail, www, on cd-r, and can be used on any platform (pc, mac, unix).

Many different files in all kinds of formats can be merged into one PDF-file, which you can perform a search in, edit and print – e.g. an InDesign-publication, Excel-files, diagrams – and only the printer will limit the sizes of paper that can be printed on.

Furthermore Adobe offers a free Reader, which can be used to reading the PDF-documents on the computer and in the browser. That enables the PDF format to be used by everyone, as apposed to other file formats that demands that the person reading the documents, need to buy or get access to that specific programme, that the file has been saved by.

If you don't have Adobe Reader on your computer, you can download it from:
www.adobe.com

Create a PDF-document from MS-Office-programs

With Adobe Acrobat 9 installed on your computer, it's easy to convert e.g. a Word-document to PDF:

1. Create and save the Word-document (.docx).
2. Select the tab *Acrobat*, the button *Create PDF* in the group *Create Adobe PDF*.
3. Click *Yes* in the dialog box to save the PDF-document.
4. Name the document and choose where to save it and click *Save*.

Now the document is converted and opened in Acrobat.

The document now exists in both the original and PDF-format, which data-wise will the size of the file will be a lot smaller.

Create a PDF-document other programs

Converting a document to PDF from other programs than MS Office-programs is typically done via the Print-function. Instead of printing a physical printer Acrobat saves the document on a "virtual printer" Adobe PDF.

The document is named and saved the same way as the method mentioned above. This method can also be used in Microsoft-programs.

Exercise 9 – Create a PDF-document from multiple files

1. Open Adobe Acrobat 9 Professional.
2. Collect the three documents in the folder **exercise 9** to a single PDF-file:
 - a. InDesign-file (a DTP-document) **gumlink.indd**
 - b. PowerPoint-file **Gumlink-presentation.pptx**
 - c. Word-document **Gum.docx**

Select the button *Create – Merge Files into a Single PDF...* and select *Add Files...* in the dialog box that appears.

Select the first file that should be included (e.g. **gumlink.indd**), click *Add Files* and select the button *Add Files...* again, until all three files appears in the overview box.

3. Inspect the PDF-document.
4. Compare the two documents file size.
5. If you wish to edit the PDF-document, this can be done in Adobe Acrobat 9 – not in the reader – by selecting *Tools – Advanced Editing – TouchUp Text Tool*.

!!! Evaluation of the course

Thank you for participating in the Image Processing (Photoshop CS5) workshop held by the Advanced Multimedia Group (AMG) at ASB.

In order to increase the quality of future AMG workshops, we kindly ask you to use 5 minutes to answer this evaluation. The answers are anonymous and confidential, and will only be used internally in AMG.

<http://www.surveymonkey.com/s/RJPWN2D>

Thank you for your help!