

Macro Photography

For this project, you will be learning two different ways of getting closer to your subject than previously possible.

Technically, macro, or micro, photography as it might more aptly be named, is when your subject appears at a 1:1 ratio (at least) on the film or digital sensor.

The Wiki site for Macro Photography is exceptionally good; click [here](#) to see it.

For example, if I was to take a photo of a ruler with a macro lens, and was to hold up the same ruler to the negative, an inch on the film would actually be the same size as on the ruler.

There are a number of ways to get true macro shots:

- Using extension tubes to move your lens further away from your sensor or film
- Using a macro lens specific to your camera
- Using lens attachments that fit onto the end of a regular lens

We will be using the first, maybe the second, and third techniques mentioned above.

When shooting Macro, it is imperative that you use a tripod or copy stand. If shooting handheld, you must be steady, and use a very fast shutter speed.

This is because you are so close to your subject that you need to be perfectly focused on your subject.

Your depth of field will be EXREMELY short, meaning that objects between 15 and 15.2 cm's will be in focus!!!! That's 2mm!!

Lighting is also a consideration. I would suggest lighting from the sides to avoid a shadow being cast from above from the camera when using the copy stand or a tripod.

How to do it...

- Get a camera. You may shoot film or digital for this project
- Set the white balance to match your light source if shooting digital
- Set your ISO fairly low if using digital (ISO 400?)
- Set your camera to "M" for manual exposure (digital and film)
- Mount the camera on the copy stand or tripod; you may need an adaptor to move the camera out from its cradle
- Either use the extension tubes, the diopter lens attachments, a macro lens or a combination
- It is up to you to decide what lens to use, as long as it has a 52mm diameter barrel to accept the diopters. I suggest starting with a 50mm
- Light your subject to avoid shadows; use natural light, or set up 4 lights to illuminate the base of the copy stand
- Focus your camera. Use the "In-focus" indicator in the viewfinder. Ask me for help if need it
- You will want to set your camera to manual focus for maximum control

- Hold steady when releasing the shutter
- Preview your photo if shooting digital using the histogram (ask if you are unsure what this is)
- Adjust your exposure if you are getting photos that are “burnt out” or too dark
- Upload your digital files, or develop your negatives.

You’ll be handing in...

- A folder with your name on it into my Teacher Dropbox, or the appropriate location I specify
- This folder will contain three subfolders: one titled “Diopter” containing the 5-10 best photos taken with the diopters
- A second folder titled “Extension tube” containing the 5-10 best photos taken with the extension tubes
- A third will be 5-10 photos taken with a combination of both diopters and extension tubes, or Macro lens and extension tubes, or all three (!)
- In total, you’ll be handing in 15-30 photos
- All your photos should be handed in as .jpg’s
- All photos should be cleaned up in Photoshop (curves, levels, rotated and cropped)
- Work with your lighting to minimize shadows
- I would like each jpeg to be titled after what it is, for example “25centcoin.jpg”, this really helps me out, as I cannot always tell what is what!



What you’ll be marked on

Prints will be considered as a whole and you will be marked on the following:

Exposure /20

- Prints are properly lit, with few “burnt out sections; whites are white, blacks are black, greys are grey
- No harsh shadows

Focus /10

- Your subject should be in focus, not the background

Aesthetics /10

- You have well composed image of an interesting object

White Balance /10

- You have adjusted your white balance to the lighting you are using

Total /50