Colchester Photographic Society Short Summer Course

Digital Photography for Beginners

Part One – Know your camera and settings

Camera Settings - Some general Rules-of Thumb

OUTDOORS

Landscapes

- Bright Sunny Day
  - Lowest ISO setting, say ISO 100
  - White balance either automatic or sunny setting
  - Smallest aperture that your lens permits (f8 – f22).
  - Focus on nearest object you want to be sharp, which will render it and everything behind it also in focus.
  - Still use tripod if possible.
  - Remember, if the overall tone of your image is lighter than mid-grey, having for example a lot of sky, increase exposure compensation by $+1 - 1^{2}/_{3}$. However if predominantly grass leave reduce to much less over exposure or maybe none at all. Normal green grass is a mid-tone.

- Overcast Dull Day
  - Either leave at ISO100 and use a tripod or Increase ISO setting to ISO 200
  - White balance to "Overcast Sky" (which is normally depicted on a camera by a graphic having a little group of clouds), but don't forget to change white balance if it gets brighter or you go indoors.
  - Smallest aperture that your lens permits (f8 – f22).
  - Focus on nearest object you want to be sharp, which will render it and everything behind it also in focus.
  - Remember, if the overall tone of your image is lighter than mid-grey increase exposure compensation. In this situation it maybe that only $+^{2}/_{3rds}$ is required or none at all.

Portraits

- Bright Sunny Day
  - *Best advice. Ideally, get your subject out of bright sunlight.*
    Why? …because if you have them facing into the sun they will squint, if you have them with their back to the sun their face will be under-exposed and therefore dark. Sideways on they will have a shadow running across the face from the nose, etc.
  - Lowest ISO setting, say ISO 100
  - Large aperture (f2.8 – f4). If you get *really, really* close use f4 or a little higher.
  - Focus on their eyes or bridge of their nose.
  - Don't use tripod. Restricts your freedom of movement and creativity.
  - Try tipping your camera at an angle to create a more dynamic image …. But don't do this too often in the same sitting as it becomes "samey" and loses impact
  - Try placing your subject to one side of the frame, get them to turn or look inwards into the image (not out of the frame) and include a little of their surroundings.
  - Unless it comes completely naturally, don't ask them to smile. It will look false!
  - Remember, exposure rules. Increase exposure if the overall tone of your image is lighter than mid-grey. Remember a white persons skin is very close to mid-tone and therefore you may only need over-expose $+^{1}/_{3}$ to $+^{2}/_{3rds}$ especially if you fill the frame with their face. However if your subject is a black person the reverse will apply. Here you will have to reduce the exposure by maybe $-^{2}/_{3}$ to $-1^{1}/_{3rds}$, it all depends just how dark their skin tone is…. Getting the idea?

- Dull Day
  - Great for portraits! The sun coming through clouds (providing they are not too dark) acts like a great big diffuser.

- Same as above, except you will probably have to increase the ISO to 200

Macro/Close Up.

- ISO is dependant on ambient light and the subject being photographed, but as usual have lowest ISO setting you can get away with, as this will give less noise and therefore better quality.
- Aperture setting will depend how close you are to your subject and the depth of field (DOF) that you need to get the important bits sharp. Remember the closer you are to a subject the greater the depth of field loss for any given aperture. If you have a macro lens and are really close you may even have to reduce your aperture setting to f12-f16. With most compact camera's the best you can achieve will be f8, so use that.
- For something like flowers, ideally use a tripod and ISO 100. Tip: take some old knitting needles and something to tie flower stem too if slightly windy. This helps to steady flower and reduce blur
- For something like insects, bee's etc, don't bother with a tripod as you will not have time, although a monopod can be an asset. An increase in film speed will probably be necessary and you will need to have a fast shutter speed to capture the insect before it flies off.

INDOORS/NIGHTIME/DARK SPACES

- Aperture settings are dictated by the subject and what areas you want to be sharp. Much of the above f-stops for the relevant subject matter will therefore still apply

Apart from that remember two things:

1. Light levels will generally be much reduced. It is always better to use a tripod than being forced to increase the ISO film speed to avoid camera shake and blurred image caused by hand-holding the camera. This is especially true of nighttimes, as the far more noise will otherwise be evident in the dark areas of the image (referred to as the "shadow areas")

2. Daylight settings will change. If you are shooting under tungsten, fluorescent or other forms of artificial light DON'T FORGET TO CHANGE THE WHITE BALANCE SETTING. Otherwise the image will come out with some strange colours that will probably not be to your liking.

A FINAL TIP

If all else failings, remember it is better to have a sharp image than a blurry one, unless this is deliberately your intention.

In which case, if you do not have/can't use a tripod, increase the ISO film speed so that the shutter speed falls within acceptable limits. The rule of thumb here is that, when hand-holding a camera, to avoid camera shake, the shutter speed should be approximately the same number as the focal length of the camera. So with a normal lens this is about 1/60th second or slightly les if you have steady hands. With a longer lens, 70-200mm zoom it will be 1/200th second when the lens is at its furthest.

If you get lots of noise, turn your image into a black & white image (called "monochrome) and simulate the kind of noise you often find in a traditional dark room "wet" print. In fact sometimes it's best to even add more noise to create a more ethereal, moody feel to your image.