

IONIAN UNIVERSITY – DEPT. OF AUDIO & VISUAL ARTS

LABORATORY OF PHOTOGRAPHY

PROFESSIONAL PHOTOGRAPHY II

ASSIGNMENT 6 – FLAT ORIGINAL COPY

You are asked to copy photographically a colored flat original (painting, photograph or else) of small or medium size (whose bigger dimension is equal or smaller to the available umbrellas' diameter). You can use either an analog or a digital camera.

- If you are going to use film, choose one adjusted for a Kelvin temperature as close as possible to the Kelvin temperature emanated by your light sources. It is strongly recommended the use of a fine grained film of the lowest possible ISO value (color transparency films allow for a smaller amount of exposure errors compared to negative films, but they yield a better color quality/saturation). If you shoot digital, choose your camera's lowest available ISO value and adjust the white balance for the Kelvin temperature of your light sources. In both cases use a good quality lens especially designed for copy work.
 - Your goal is that of achieving just the correct exposure (with an error smaller to 1/6 of a stop), when you use positive or negative film. With a digital camera, you may opt for normal as well as ETTR exposures.
1. Place your lights equipped with umbrellas at a height equal to the middle height of the artwork and point each one of them slightly off centre (each light points to the opposite farther end of the artwork). If the original's size is rather small, two lights are going to be sufficient (one at each side), for larger size originals you may need to use four lights (two at each side) in order to obtain a perfectly even illumination throughout the original's surface. Check for reflections and take measures to avoid them. The light meter's indications (incident light) have to be equal between the area's center and its four corners.
 2. Place close to the original a good quality color checker and/or a checker of neutral tones (from absolute white to pure black) which you are going to use during the picture's editing in order to obtain colors as faithful as possible.

3. Measure the light source's Kelvin temperature and decide for the type of film to use (and eventually the necessary Color Compensation filters) or adjust directly your white balance in a digital camera.
4. Measure the original's average height and place the lens' centre at that same height. Use the grid on your ground glass in order to check that the long and short sides of the original are respectively parallel between them, or take measurements of equal distances from the lens' center point to two equally distant points to the right and left of your artwork along the supporting wall. If the latter is not 100% vertical, adjust your camera's back so that it is parallel to the wall.
5. Find out the exact aperture and shutter speed values (if you use continuous light sources) or the aperture value (if you use flashes) and compensate for (1) filter/filters factor/s, (2) eventual reciprocity failure factor (*) and (3) if using a view camera eventual bellows factor, when the distance between the two view camera's standards increases more than the lens' focal length.
6. Consider the possibility of using a polarizer and in case correct the exposure according to its factor.
7. When using film, expose according to the following order: Underexpose by 1 f-stop, then by 2/3 of a stop, then by 1/3 of a stop. Expose then normally, afterwards overexpose by 1/3 of a stop, then by 2/3 of a stop, and finally by 1 f-stop.

For this assignment you need to submit:

If you have used color digital pictures: all digital archives in raw- and jpeg- formats

If you have used color analog pictures: the whole positive film (or the whole negative film + its contact sheet) with all different exposures

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For what concerns this point, different films have different compensation factors for exposures longer than 1 second, as specified by the manufacturer's instructions. Another problem with long exposure times is the possible occurrence of color shift that can be corrected by use of appropriate filters, as specified by the various films' manufacturers.