# The Art and Science of Digital Imaging

**Project one: "Color Grading"**

Inspired by the recent popularity of the color grading process in film, the goal of this project is to use basic color editing tools to adjust and enhance the lighting of an image. You will take a **starting image** of your choosing and, using only the localized color modification tools we cover in class, try to alter the lighting so it matches a **reference image**.

You must choose both your starting and your reference image. The best reference images for this assignment are those with expressive, evocative, and potentially un-natural uses of light. Color grading, after all, is used to enhance shots beyond what was captured on-set, quite often with painterly lighting effects that were not even possible in-camera.

I pulled together 7 reference images (from the collections of the Louvre and the Museum of Modern Art) which you are free to pick from if you want. They are viewable/downloadable from the class web page and are also in the handouts folder.

You will need to scan your starting image and your reference image (if you find one of your own). Please use a spatial resolution between 600 and 1000 pixels for each dimension of the starting image. It's ok for reference images to be found online and for them to be less than 600x600 in spatial resolution - just make sure the colors are visible.

NOTE: When scanning an image that is NOT a photograph, use the **descreen** option on your scanner software. It should be located somewhere in the scanner settings window. If activated, the descreen process should remove aliasing artifacts that commonly occur when scanning printed material.

You are free to use color modification tools such as brightness, contrast, HSV, color balance, levels, and curves to make the changes. **Do NOT** use any retouching, cut and paste, layers, etc., *even if you know these tools*. This exercise is intended to get you familiar with color, both in terms of training your eye and in using a number of the color-correcting tools.

The approved tools, by default, make changes to the **entire** image! This won't be very useful to you. Instead, you will have to make **localized** changes to the color which will require you to use Photoshop's **selections**. These will be introduced in class on Wednesday but feel free to learn about them in advance if you want.

>       TIP: the more your starting image looks like your reference image, the easier the assignment should be.

## PART ONE due Wednesday, September 21$^{st}$ at the beginning of class

>       Copy digital versions of both of your images to the **handin** folder on the Course Storage disk. They should be in a lossless format that can be read by Photoshop on the Mac. I recommend the "Photoshop" format (suffix .psd) but TIFF should work, too. Name them unambiguously (e.g., "ChrisPerryStart.psd, ChrisPerryReference.psd").

## PART TWO due Monday, September 26$^{th}$ at the beginning of class

>       Copy your altered image to the **handin** folder. Again, use a lossless file format that can be read by Photoshop on the Mac, and name the image so I can identify who put it there ("ChrisPerryFinal.psd"). Your final image should be exactly the same spatial resolution as your starting image.

>       If you are **not** working on the machines in the classroom, **make sure** your image looks the way you think it should when viewed on a classroom computer!

>       It is your responsibility throughout the semester to make sure all of your images are handed in properly and on time. I won't consider this project handed-in unless the files are in the right places, are properly named, and can be read by Photoshop on the Mac. Please ask your classmates, the TA, or me for assistance if you need it.