

# **CTPR 427**

## **Introduction to Color Grading**

Spring 2019

2 units

Prerequisite CTPR 310 or CTPR 508

Wednesdays 9am – 11:50

Color Correction B, B104 (SCB-B104)

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- LAPTOPS, TABLETS & CELL/SMART PHONES NOT ALLOWED DURING CLASS FOR PERSONAL USE**
- NO ONE MAY AUDIT THIS CLASS**

Welcome to Introduction to Color Grading, CTPR 427. The class will alternate between lectures, screenings and discussions and hands on workshops. Therefore, class attendance is mandatory and tardiness is not accepted.

### **Course Objectives**

This class is an introduction to the art, craft, and science of color grading, also known as color correction and color timing. The course will explore various aspects of grading and how it can enhance and improve storytelling. The objective is for students to gain a greater understanding of the intricacies and components of photographed images and to learn to reshape them using color grading techniques. Class will be a mixture of lecture and hands on labs using the color grading tools of DaVinci Resolve.

At the successful completion of the course, the student will:

- Work in DaVinci Resolve to create and manage projects, navigate the interface, use the main primary and secondary color grading tools, and work with different types of digital cinema formats.

- Gain a working knowledge of color theory.
- Understand color management fundamentals for different color grading workflows.
- Successfully re-balance the contrast and color of images, the core foundation of a colorist's work.
- Successfully create cohesive looks across scenes.
- Learn techniques to use color creatively to impact the "mood" and "feel" of a scene
- Apply secondary color grading tools to isolate and adjust areas of the frame or individual colors in the frame
- Learn color grading techniques that are similar to toolsets found in other applications.
- Learn to apply successful techniques that maximize creativity and address time management in a collaborative color grading session as a colorist and a filmmaker.

### **Focus of Hands on Labs and Assignments**

- Creating "balanced" images
- Learning scene to scene color grading- creating cohesiveness from shot to shot, within a scene and throughout a film.
- Learning additional color grading techniques

### **Required Text**

**"The Art and Technique of Digital Color Correction", by Steve Hullfish (2nd Edition).**

### **Course Outline**

Attached is a schedule of classes. The class will begin with an introduction to the color grading process and move to hands on labs where students will apply the process to provided footage. Hands on labs and assignments will utilize footage from projects photographed by students in previous semesters with review and discussion of the work done.

### **Required Equipment**

For labs and assignments you will need an approved hard drive to store the video assets used in this class. The SA will provide a list of approved drives. This hard drive must be available before the second week of class.

## **Grading**

Grading will include a combination of elements, including class participation and a series of assignments to determine the student's comprehension of the different aspects of color grading.

20% - In-class participation\*

15% - Assignment #1

15% - Assignment #2

15% - Assignment #3:

15% - Assignment #4:

20% - Final exam

\*Class participation: CTPR 427 is a workshop course that requires students to practice color correction techniques demonstrated in class. You are expected to fully participate in all in-class exercises, and achieve competence in the techniques necessary for the successful completion of the assignments. In addition, you are expected to provide constructive critiques of your fellow students' work presented in class, and participate actively in the weekly discussions.

## **Absence/Lateness Policy**

This is a hands-on workshop therefore attendance is mandatory and tardiness is not accepted.

An absence can be excused or unexcused. An excused absence must be discussed with me and you must have a note from an authority. A medical absence (in order to be excused) requires a visit and a note from a doctor. If an absence is unexcused, it will affect your final grade as follows:

Each unexcused absence: Drops one portion of a grade.

For example, if you are absent once, and assuming your grade was an A, the grade would drop one portion from A to A-. If you are absent twice, the grade would drop two portions from A to B+. If you are absent three times, the grade would drop from A to B-, and so on.

If you only have one absence during the semester it will be excused.

Showing up late for class affects your final grade as follows: each two latenesses drops the grade by one portion of a grade, i.e. assuming your grade was an A, and you are late twice, the grade drops to an A-, and so on. The first lateness is excused.

## Academic Conduct

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards* <https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct/>.

Discrimination, sexual assault and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* <http://equity.usc.edu/> or to the *Department of Public Safety* <http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us>.

This is important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men* <http://www.usc.edu/student-affairs/cwm/> provides 24/7 confidential support, and the sexual assault resource center webpage [sarc@usc.edu](mailto:sarc@usc.edu) describes reporting options and other resources.

## Support Systems

A number of USC’s schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* <http://dornsife.usc.edu/ali>, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* [http://sait.usc.edu/academicsupport/centerprograms/dsp/home\\_index.html](http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html) provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* <http://emergency.usc.edu/> will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

## **Class Outline**

### **Week 1**

01/09/18

Overview of curriculum and course.

Introduction to the art, craft and science of color correction.

Discussion and screening of examples of the color correction process. Introduction to one of the most valuable tools of a colorist- working with video scopes for analyzing the luminance and color makeup of the image.

### **Reading Assignment: Ch. 1 of “The Art and Technique of Digital Color Correction”**

### **Week 2**

01/16/18

Primary Color Correction: Contrast

Application: DaVinci Resolve

What is primary color correction? Adjusting the tonal range of the image is one of the most important components of color correction, used to help reshape the image for effect, to suggest light conditions and time of day, helps to establish mood and focuses the viewer's attention on important details. Screening of examples and approaches in the main color suite will be followed by hands-on time in the lab.

Introduction to the basic toolset of DaVinci Resolve. By the end of the class, students will be reshaping the contrast of different shots, including simple fixes. Students will utilize the Waveform video scope to aid in their work.

### **Reading Assignment: Ch. 2 of “The Art and Technique of Digital Color Correction”**

### **Week 3**

01/23/18

Primary Color Correction: Contrast

Application: DaVinci Resolve

Continuing to explore how to reshape the contrast of the image.

**Reading Assignment: Ch. 3 of “The Art and Technique of Digital Color Correction”**

**Assignment #1 handed out**

Week 4

01/30/18

**Assignment #1 due before class.**

Primary Color Correction: Color Balancing

Application: DaVinci Resolve

What is a balanced image? What is a color cast and how to analyze it?

There will be discussion of color theory as it relates to human perception of images.

This is a fundamental topic as a person's perceptions influence decisions and approaches to balancing the image and refining the look for a film. The discussion of color theory will also delve into the use of color contrast and the color palettes in the photographed image.

The class will move to the lab for a hands-on exercise in how to balance the color of an image in DaVinci Resolve, starting with basic color controls, and utilizing video scopes including the Vectorscope and the RGB Parade. The importance of the relationship between color and luminance will be explored. Students will balance shadows, highlights and mid-tones to create a balanced image. The goal of this lesson is to demonstrate the creation of naturally balanced images, where colors appear natural and realistic.

**Reading Assignment: Ch. 4 of “The Art and Technique of Digital Color Correction”**

Week 5

02/06/18

Balancing Color/Creating Looks

Application: DaVinci Resolve

This week's class continues to focus on how to balance color. Learning to balance color to create a naturalistic rendering of a scene is only one aspect of color balancing.

Balancing techniques can be used to enhance imagery to create more stylized looks as well. “Looks” can be used in multiple ways including using color (and contrast) to

suggest a specific time of day or type of light source, create day for night, imply emotional context, or be used for stylized effect. Screenings of examples from popular films with different looks will be explored. The class will then move to the lab.

**Reading Assignment: Ch. 10 of “The Art and Technique of Digital Color Correction”**

**Assignment #2 handed out**

Week 6

02/13/18

Scene to Scene Color Grading

Application: DaVinci Resolve

Matching shots within a scene, and keeping a look cohesive and consistent throughout a scene or entire project is the focus for this class. Workflows for color grading within time restrictions will be explored. In this first lesson on matching, students will be introduced to additional tools in Resolve to aid in the process- including working with multiple nodes, utilizing stills for comparing images, copying previous corrections and other techniques commonly used by colorists.

Week 7

02/20/18

Story and Context

Application: DaVinci Resolve

The second lesson in the use of creative looks to enhance the image for specific effect. Exploring the role of the colorist in helping to shape the look of a project, with emphasis on enhancing and sometimes altering the story and emotional context. We'll look at examples of working with different types of color contrast and color palettes.

**Reading Assignment: Ch. 8 of “The Art and Technique of Digital Color Correction”**

Week 8  
02/27/18

**Assignment #2 due before class.**

**Workflows and Formats**

We will cover techniques for working with and handling various modern formats including log and raw formats, which are today's digital equivalents of film negative. We will cover an overview of various color spaces and related topics, the optimum viewing environment and an introduction to color management.

**Assignment #3 handed out**

Week 9  
03/06/18

**Working With Different Formats**  
Application: DaVinci Resolve

A continuation of topics related to working with different types of formats. Afterwards, students will spend hands on time in the lab exploring how to work with log based footage.

SPRING RECESS  
03/13/18

Week 10  
03/20/18

**Workflow with DaVinci Resolve**  
Application: DaVinci Resolve

Hands on lab to “roundtrip” an edited project from Avid to DaVinci Resolve for color correction.

Week 11  
03/27/18

**Assignment #3 due before class.**

Evaluating Previous Assignment  
Application: DaVinci and Avid Media Composer

In the lab, we'll reevaluate how to balance images by reviewing students' previous assignments.

**Reading Assignment from "The Art and Technique of Digital Color Correction"**

**Read sections:**  
**Pg. 336-337, talk like a DP**  
**Pg. 462-465, communicating with clients**

Week 12  
04/03/18

Secondary Color Correction in DaVinci Resolve, Part 1  
Application: DaVinci Resolve

Advanced features of DaVinci Resolve will be explored. Secondary color correction overview. Working with Power Windows. This lesson will be taught in the lab for students to have a lot of hands on time.

Week 13  
04/10/18

Secondary Color Correction in DaVinci Resolve, Part 2  
Application: DaVinci Resolve

Review of secondaries from the previous week. Continuing to explore secondaries, looking at "keying" colors to manipulate individual colors in the image. Combining keys and Power Windows for greater control will also be covered. This lesson will also be taught in the lab for students to have a lot of hands on time.

**Reading Assignment from "The Art and Technique of Digital Color Correction"**

**Read sections:**  
**Pg. 68-70, Pg. 164-165**

Week 14  
04/17/18

Color Grading Assignment 4 (in class)  
Advanced Color Correction Tools

The first part of this class will be an in-class, timed assignment that will be graded (assignment 4). Each student will be given a specific time limit to color grade a project to specific instructions, which is similar to real world color grading scenarios, where an allowance of time is part of the general parameters of color grading.

The second half of this class will focus on more of the advanced tools available in DaVinci Resolve. This lesson will be taught in the lab.

Application: DaVinci Resolve

Week 15  
04/24/18

Communication and Collaboration  
Application: DaVinci Resolve

Color grading is a process of collaboration. Usually a cinematographer and/or director "supervises" the color grading of a project. The primary role of the colorist is to help the filmmaker realize their vision. Understanding the intent of the filmmaker is crucial to success. There will be discussion about how to communicate effectively, either as the colorist or as the filmmaker working with a colorist.

Finals Week

Final Exam is due no later than 05/03

Each student color corrects a final short project for their final exam. Instructions to be given out during final class meeting.