

# **USC SCA CTPR 427 INTRODUCTION TO COLOR GRADING**

Fall 2018

PreRequisite CTPR 310 or CTPR 508

2 Units

**INSTRUCTOR:** Clark Muller

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**CELL:** (805) 807 2880

**DAY:** Wednesday

**TIME:** 9-11:50am

**LOCATION:** Color Suite (SCB-B104) and Work Stations B104

**SA:** Jiaxi Francis Lu

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**CELL:** (424) 393 6054

Please note the final class is Monday, Dec. 10th from 11AM until 1PM. All students are required to attend class and take the in-class final that day.

**LAPTOPS, TABLETS & CELL/SMART PHONES NOT ALLOWED DURING CLASS FOR PERSONAL USE.**

**NO ONE MAY AUDIT THIS CLASS**

**REQUIRED TEXT:** “The Art and Technique of Digital Color Correction”, by Steve Hullfish (2nd Edition). I will be teaching concepts that can be revisited in the book throughout the semester and the book can be used for a concept refresher after the class has been completed.

## **OVERVIEW:**

Welcome to Introduction to Color Grading, CTPR 427. This class is an introduction to the art, craft, and science of color grading, also known as color correction, color timing or digital color-correction. The course will explore various aspects of color 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 how to reshape them using color grading techniques.

The class consists of lectures, screenings, discussions, and hands on exercises using the color grading tools of DaVinci Resolve.

## **LEARNING OBJECTIVES:**

Students will develop a working knowledge of color theory.

Students will apply color management fundamentals for different color grading workflows.

Students will re-balance the contrast and color of images, the core foundation of a colorist's work.

Students will create coherent looks across scenes.

Students will apply techniques to use color creatively to impact the "mood" and "feel" of a scene.

Students will apply secondary color grading tools to isolate and adjust areas of the frame or individual colors in the frame.

Students will utilize color grading techniques that are similar to toolsets found in other applications.

Students will apply successful techniques that maximize creativity and address time management in a collaborative color grading session as a colorist and a filmmaker.

## **REQUIRED COURSE EQUIPMENT:**

For the lab and assignments students need an approved hard drive to store the video assets used in class. The SA will provide a list of approved drives. This hard drive must be available by 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. Students are expected to fully participate in all in-class exercises, and demonstrate competence in the techniques necessary for the successful completion

of the assignments. In addition, students are expected to provide constructive critiques of your fellow students' work presented in class, and participate actively in the weekly discussions.

### **ABSENCE AND LATENESS POLICY:**

Absence or lateness will be categorized as excused or unexcused. An absence or lateness is considered excused if you discuss it with me (in advance) and provide documentation. This decision is made by each instructor. So please don't assume permission from one automatically means you will receive permission from all instructors. Medical absences require a visit and note from a doctor.

Unexcused absence will alter your final grade in the following way: (Examples assume you earn an A.)

One absence will result in your final grade two portions of a grade, i.e. from A to A- (one) to B+ (two portions of a grade).

Two absences will result in your final grade dropping one full grade, i.e. from A to a B.

Three absences will result in your final grade dropping two full grade, i.e. from A to C.

Unexcused lateness will alter your final grade in the following way: (Examples assume you earn an A.)

One lateness will not count against you, it's LA.

Two will result in your final grade dropping one letter portion of a grade, i.e. from A to A-.

Three will result in your final grade dropping by two portions of a grade, i.e., from A to A- (one), to B+ (two portions of a grade).

Four will result in your final grade dropping three portions of a grade, i.e. from A to A- (one) to B+ (two), to B (three portions of a grade). And so on...

If you arrive late, you **MUST** come to me during a break and let me know you are present. Please don't assume I saw you arrive. If you fail to do so, you may be marked absent.

### **CLASS OUTLINE:**

#### Week 1- August 22nd

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- August 29th

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- September 5th

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- September 12th

**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? Discussion of color theory as it relates to human perception of color and how that influences our decisions and approaches to balancing the image and refining the look for a film, including exploring color contrast and the color palette.

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 lumi-

nance 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- September 19th

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- September 26th

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- October 3rd

Story and Context  
Application: DaVinci Resolve

The second lesson in the use of creative looks to enhance the image for specific effect is presented. 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. Examples of working with different types of color contrast and color palettes will be presented.

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

Week 8 –October 10th

**Assignment #2 due before class.**

Workflows and Formats

Week 8 covers techniques for working with and handling various modern formats including log and raw formats, which are today's digital equivalents of film negative. An overview of various color spaces and related topics, including the optimum viewing environment and introduction to color management will also be covered.

**Assignment #3 handed out**

Week 9- October 17th

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.

Week 10- October 24th

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- October 31st

**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**

**Assignment #4 handed out**

Week 12 – November 7th

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 – November 14th

**Assignment #4 due before class.**

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**

November 21st – THANKSGIVING BREAK NO CLASS

Week 14 – November 28th

Introduction to Advanced Color Correction Tools  
Application: DaVinci Resolve

Focusing on more of the advanced tools available in DaVinci Resolve. This lesson will be taught in the lab.

Week 15

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.

Final – Is scheduled for Monday, Dec. 10<sup>th</sup> from 11AM until 1PM.

Each student color corrects a final short project in the classroom for their final exam.

## Statement on Academic Conduct and Support Systems

### 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 Part B, Section 11, “Behavior Violating University Standards” <https://policy.usc.edu/scampus-part-b/>. 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>.

### Support Systems:

*Student Counseling Services (SCS) - (213) 740-7711 – 24/7 on call*

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. <https://engemannshc.usc.edu/counseling/>

*National Suicide Prevention Lifeline - 1-800-273-8255*

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. <http://www.suicidepreventionlifeline.org>

*Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call*

Free and confidential therapy services, workshops, and training for situations related to gender-based harm. <https://engemannshc.usc.edu/rsvp/>

*Sexual Assault Resource Center*

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: <http://sarc.usc.edu/>

*Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086*

Works with faculty, staff, visitors, applicants, and students around issues of protected class. <https://equity.usc.edu/>

*Bias Assessment Response and Support*

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. <https://studentaffairs.usc.edu/bias-assessment-response-support/>

*The Office of Disability Services and Programs*

Provides certification for students with disabilities and helps arrange relevant accommodations. <http://dsp.usc.edu>

*Student Support and Advocacy – (213) 821-4710*

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. <https://studentaffairs.usc.edu/ssa/>

*Diversity at USC*

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. <https://diversity.usc.edu/>

*USC Emergency Information*

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible, <http://emergency.usc.edu>

*USC Department of Public Safety – 213-740-4321 (UPC) and 323-442-1000 (HSC) for 24-hour emergency assistance or to report a crime.*

Provides overall safety to USC community. <http://dps.usc.edu>