CTPR 427
Introduction to Color Correction

Spring 2016
2 units
prerequisite CTPR 310 or CTPR 508
Wednesdays 9am – 11:50
Color Correction B, B104

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Office Hours: 12-2 Wednesday
SCA 409

SA: TBD

No cells, laptops or tablets in class

No one may audit the class without the permission of the instructor

Welcome to Introduction to Color Correction CTPR 427. We will meet WEDNESDAY MORNINGs from 9 am to 11:50 am. This class will start with more lecture and instruction, then transition in to a more hands on workshop. Because of this, class attendance is mandatory and tardiness is not accepted.

Course Objectives:

This class is an introduction to the craft of color correction. Known by terms such as color grading and color timing, we will explore the various aspects of color correction and how it can enhance and bring your storytelling to new levels. The objective of this course is for students to gain a greater understanding of the makeup of the image and how to reshape it using color correction, and be able to start color correcting for other students. The class will be a mixture of lecture and hands on labs with the color grading tools of DaVinci Resolve and Avid.

• Gain a greater understanding of the role of color grading and the colorist as part of the image pipeline from pre-production through to final finishing.

• Explore of the makeup of the motion picture image. The more you can “see” in the image, the greater your understanding of your choices and options for refining and reshaping the image.
• Learning aspects of color theory as it relates to the human experience and imagery to help you evaluate images, shape images, and control the viewing experience and impact the emotional context of the story.

• Exploring the components of working in a color grading session- both in the role of the colorist and as the filmmaker working with a colorist

• Coverage of color grading techniques that can be applied through different color correction software.

Hands on Labs and Exercises:

• Create “balanced” images and “match” shots to one another.

Additional Reading:

There is a required textbook, “The Art and Technique of Digital Color Correction”, by Steve Hullfish (2nd Edition). We will use this book as a backdrop for our discussions of the processes that are used. 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. We will utilize the lab's computers for hands on learning of the applications.

Assignments:

Attached is a schedule of classes. We will start off with instruction of the color grading process and move to workshop situations where you will practice going through the processes. We will transition into color correcting 310/508 projects with review and discussion of the work done.

Required Equipment:

For the labs and for assignments you will need an approved hard drive to store the video assets used in this class. Please talk to SA about what you will need. 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 correction.

  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 will be 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 will be 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 and 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.

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.
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/](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/](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/](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.

**Schedule**

**Week 1**
- January 13th

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**
- January 20th

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**
**January 27th**

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**
**February 3rd**

**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 about 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 luminance will be explored. Students will balance shadows, highlights and mid-tones to create a balanced image.

**Reading Assignment: Ch. 4 of “The Art and Technique of Digital Color Correction”**
Week 5  
February 10th

Balancing Color/Creating Looks  
Application: DaVinci Resolve

Continuing to explore balancing color.

Then the first lesson in creation and refinement of different "looks". Looks can be used in multiple ways including 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  
February 17th

Matching  
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  
February 24th

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. 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  
March 2nd

**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 and introduction to color management.

**Assignment #3 handed out**

Week 9  
March 9th

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**

Week 10  
March 23rd

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  
March 30th  

**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.

For the 2nd part of the class, we'll get an introduction to the color correction toolset in Avid Media Composer.

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
April 6th

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
April 13th

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
Week 14
April 20th

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
April 27th

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
May 4th

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