CTPR 427
Introduction to Color Correction

Spring 2013
2 units
prerequisite CTPR 310 or CTPR 508
Thursdays 9am – 11:50
Color Correction B, B104

Andrew Balis
abalis@mac.com
818-599-4949
Office Hours: 12-2 Thursday
SCA 409

Guest lecturing:
Matt Radecki
Different by Design
mattradecki@gmail.com
310-689-2470

SA: Harry Locke
708-415-6215
hlocke@usc.edu

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 THURSDAY MORNINGS from 9 am to 11:50. This class will start with more lecture and instruction, then transition in to a hands on workshop. Because of this, class attendance is mandatory and tardiness is not accepted.

Course Objective:

This class is an introduction to the craft of color correction. Known by many 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. We will go through the various toolsets available and how best to implement them. The objective of this course is to get the students comfortable

with color correction to where they can start color correcting for other students. We will move between the color grading tools of DaVinci Resolve, Avid Media Composer, and Avid Symphony. The majority of work will be completed using DaVinci Resolve.

Required 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 correction 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.

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.

30% in-class participation*
10% - Assignment #1
10% - Assignment #2
15% - Assignment #3:
15% - Assignment #4:
20% final project

*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 of the assigned reading. The class will also be reviewing color correction techniques being applied in movies today and how it differs from past techniques.

Matt Radecki, USC alumnus and CEO of Different by Design, a Post house, will be on hand to help us explore modern film post production and the caveats that are possible with such a diverse world of codecs. This world of post demands a dedicated work-flow outline of any production before it shoots. Students are expected to relate these work-flow lectures to the possibilities of their future productions and engage Matt in a dialogue about the issues.

Students with Disabilities:

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure that the letter is delivered to the Professor as early in the semester as possible. DSP is located in STU 301 and is open 8:30am-5pm, Monday through Friday. The phone number is (213) 740-0776.

Statement on Academic Integrity

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. *Scampus,* the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A: http://www.usc.edu/dept/publications/SCAMPUS/gov/. Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: http://www.usc.edu/student-affairs/SJACS/.

Week 1
January 17th

Introduction to the Art, Craft and Science of Color Correction.

Does anybody really care about the way a film looks? Discussion and screening of examples of what the color correction process is about. We'll also explore the differences between traditional film color timing and today's digital tool-set for working on contemporary films. In the main color suite, Andrew and the students will start to explore one of the most valuable tools available to the 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 24th

Primary Color Correction: Contrast
Application: DaVinci Resolve

What is primary color correction? Adjusting and maximizing 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 have made adjustments to the shadows, highlights and mid-tones of images, 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 31st

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.

Reading Assignment: Ch. 3 of "The Art and Technique of Digital Color Correction"

Week 4
February 7th

Primary Color Correction: Color Balancing
Application: DaVinci Resolve

Students will follow up on color balancing learning to use the "color wheels" available in all major color correction systems. Exploring real world techniques to balancing the image. Discussion will also cover the similarities and differences between how the cinematographer manipulates color on set and the approaches that take place in color correction. In the lab, students will balance shadows, highlights and mid-tones to create a balanced image, and explore how to create color casts and color tints. Students will be reintroduced to working with the Vectorscope and RGB Parade to aid in color balancing.

Reading Assignment: Ch. 4 of "The Art and Technique of Digital Color Correction"

Week 5
February 14th

"Nodes" Workflows in DaVinci Resolve

One of the most powerful features of DaVinci Resolve is to have an unlimited amount of "layers" of color correction, called nodes. Understanding how they can benefit you in building up a look, and collaborating with others is a powerful tool. This class will meet in the lab for plenty of hands on time to explore how to apply the workflows that are covered.

Assignment #1: all students are given the same footage to grade in DaVinci.

Week 6
February 21st

Workflows

Matt Redecki will be on hand to discuss today's digital workflows, formats and give students an overview of the myriad of choices and challenges faced by today's filmmakers. Discussion of different types of deliverables for broadcast or theatrical distribution will be covered.

In the lab, Andrew will cover how to send a project from Avid to DaVinci Resolve and the roundtrip process between the two applications. Students will complete an exercise of this process.

Week 7
February 28th

Working With Different Formats
Application: DaVinci Resolve

Knowing about the different formats you may encounter and how to work with them is an integral component of the role of a colorist. Not all images are created equally. Some are designed to look "good" immediately, others leave the interpretation up to you later. Today's popular formats are a mix of both. We'll look at workflows for different formats, including working with log and raw formats, which are today's digital equivalent of a film negative. We will start by looking at examples in the main color suite and a discussion of topics to better understand the makeup of different types of images, including an overview of

color spaces and related topics, the optimum viewing environment and color management. Afterwards, students will spend hands on time in the lab exploring how to work with log based footage.

Week 8
March 7th

Creating Looks
Application: DaVinci Resolve

The class will begin with each student showing their assignment #1 in the main color suite.

After the review session, the focus of the class will shift to the creation and use of "looks". Special looks are often used to imply emotional context, mimic a time of day, create day for night, or create a stylized look. Screenings of popular films with different looks will be explored. The class will then move to the lab to explore how to create different looks.

Exploration of more advanced features of DaVinci Resolve will be covered.

Reading Assignment: Ch. 10 of "The Art and Technique of Digital Color Correction"

Assignment #2: Students are given a second set of footage to grade, with the emphasis on look creation.

Week 9
March 14th

Story and Context
Application: Avid Media Composer

The class will begin with each student showing their assignment #2 in the main color suite. After the review session, there will be discussion about of the role of the colorist in helping shape the look of a project, with strong emphasis on the story and emotional context. How to the images help support the story? Is there an arc to the look of a project that follows the arc of the story? How does one go about setting looks for a project?

In the lab, students will be introduced to the Avid Media Composer color correction toolset for balancing images.

Reading Assignment: Ch. 8 of "The Art and Technique of Digital Color Correction"

Assignment: Students will seek out 310 or 508 projects to color grade.

SPRING RECESS

Week 10
March 28th

Communication and Collaboration
Application: Avid Media Composer

Color grading is a process of collaboration. Usually a cinematographer or director "supervises" the color grading of a project. The primary role of the colorist is to help the filmmaker realize their vision. The intent of the filmmaker needs to be understood and interpreted. There will be discussion about how to communicate effectively, either as the colorist or as the filmmaker. Students will take turns in the lab in both roles, working together to achieve a look for a project.

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 11
April 4th

Secondary Color Correction in DaVinci Resolve, Part 1

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.

Reading Assignment: Ch. 5 of "The Art and Technique of Digital Color Correction"

Week 12
April 11th

Secondary Color Correction in DaVinci Resolve, Part 2

Review of secondaries from the previous week. Continuing to explore secondaries, looking at "keying" colors to manipulate individual shades in the image. Combining secondaries 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 13
April 18th

Matching, Part 1
Application: Avid Media Composer

Matching shots within a scene, and keeping a look consistent throughout a film 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 Avid, including Match Color, saving previous corrections, comparing images, and adding adjustments and looks to entire scenes or groups of shots.

Students will be introduced to the expanded color correction features of Avid Symphony.

Assignment #3: Matching shots of a scene in Avid

Week 14
April 25th

Matching, Part 2
Application: DaVinci Resolve

This lesson will focus the tools available in DaVinci Resolve for matching shots

throughout a project. Copying and saving corrections, applying similar corrections to multiple shots, using the Gallery for comparing images.

Presentation of completed color corrected projects, Assignment #3.

Assignment #4: Matching shots of a project in DaVinci Resolve

Week 15
May 2nd

Presentation of completed color corrected projects, Assignment #4. Class members will present a complete project that they have colored and are critiqued.

Finals Week

Each student presents a new project that has not been presented in class and goes over with faculty how they will improve the project.