**HHMI Modular Report**

**2015**

Joseph Bigley

Sculpture I

Art 131-01

CRN 90107

*Color Perception Sculpture Installation*

The project, titled *Color Perception Sculpture Installation*, will challenge student teams to explore the phenomenon of color and its effects on the viewer in a given environment. Students will be challenged to affect a space of their choosing or making, in a manner that reflects their understanding of color as a means of expression. Upon research and exposure through class lectures on color perception and how contemporary artists are executing comparable work, students will experiment with color to alter a physical space in a deliberate way as to utilize its impactful nature.

The nature of this project is interdisciplinary. Color mixing as well as optical light physics of color mixing will be covered as a basis for student understanding of color perception. Students will learn about the biological responses to variations to the light spectrum and how those responses are processed resulting in color perception. Principles of the workings of photoreceptors found in the human retina will be one aspect of the biological basis of color perception that this course will be covering. The understanding of color perception as being inseparably linked to light intensity and direction, will inform students on the many considerations required for effecting a space to formulate a sculpture installation. Psychological effects of color on the human psyche will be highlighted and discussed. These effects will be expected to be considered during conceptualizing how the given environment will be manipulated. The workings of digital displays and pixel color usage will be covered, as students will have the option of working with digital media as a means for completing this installation project bringing a mild yet present aspect of Computer Science into this project.

The concepts covered in this module will include:

• additive color models (color in the form of light) vs. subtractive color models (color in the form of pigment)

• biological phenomenon of color perception, photoreceptors

• psychological effects of color on the human psyche

• digital screen color presentation (RGB vs. CMYK)

This module project will be conducted in Sculpture I Art 131-01, CRN 90107. The courses are offered both Fall 2015 and Spring 2016.

Assessment strategies for this project include:  
• A research paper on perception specifically focused on the aspect of the color phenomenon students wish to direct their immersive sculpture installation by, while providing evidence of a general understanding of the biological and psychological aspects of color. The understanding of said phenomenon and students’ ability to articulate how this research informed the decisions behind the problem solving process will be a major assessment tool for this module. Determinant factors such as medium selection, relational color experimentation and execution and one’s ability to clearly explain such factors will be used as a means of assessment.

• Although students will be encouraged to experiment and embrace unexpected occurrences (as is a nature of contemporary art) the final result of their immersive color centric space will be a strong assessment tool. Does the sculpture installation achieve the desired effect in terms of harnessing the phenomenological effects of color on the viewer? How might the student team alter the work in hindsight to more greatly achieve the chosen intention on color effects?

• A reflective paper will be turned in on the day that the project is presented to the class. It is expected for students to self assess performance, the success of the finished installation as well as the performance of their peers who where in their teams.