Research Project

Motivation: While this class is fundamentally about the *physics* of light and color, my hope is that you will take the physical understanding that we develop in this class and use it to explore your own questions and interests. To start you on this path, one of the final things you will do for this course is design a project that builds on the things we have done in class.

Parameters: The project is designed to be open ended and should be something that involves a significant amount of work outside the normal work of the class. Some ideas for a project are:

1. Research paper (6-8 pages)

2. Experiment with write-up/poster (demonstrate or test a light/color effect in the lab)

3. An artistic project (design a project that demonstrates some interesting physics-based light or color effect in an artistic way)

4. Something else (make me an offer)

I am happy for this to either be an individual or group project (it is probably not reasonable for the research paper to be a group project, but any of the others could be). Of course, I will expect proportionately more work from larger groups.

There are some (although not unlimited) funds for this. Please talk to me about any equipment or materials that you think you are likely to need.

Your initial project proposals should include 1) the question you are seeking to answer or explore, 2) what you will actually do, 3) a rough timeline for when you will do which parts. **It is strongly recommended that you speak with me for some help/guidance in shaping your projects.**

Important Dates:

Sunday, March 15: Initial Proposals due for Project

Friday, March 20: Final Proposals and materials lists / budgets due

Tuesday, March 31, 8:30am: Projects due**.**

NOTE: If your project requires the ordering of materials and/or the building of things, please let me know well in advance as that will add time to the project.