Week One Assignment Directions:

- Choose one or more of the following activities
- Answer the questions and/or take photographs of your completed activity
- Save your file with your last name/first name ie: GraveSusannah.doc
- Upload a document with your photos and your answers to the Moodle Classroom assignment drop box.

Activity #1: Color Light Experiment

Materials: Prism, red light, green light, blue light, something to plug the lights into (ie: lamp or flashlight), colored paper or surfaces (RGB)

Objective: The student will gain an understanding of the nature of additive color through hands on experiments.

- Use a prism or a crystal in a window to refract light into the spectral hues.
- Experiment with colored lights; use a red-, a green-, and a blue-colored bulb to understand both additive (light) and subtractive (surface) color systems in a darkened room.
- For example: Shine a red light on a green surface, a green light on a red surface and a blue light on a green surface. Overlap two or all three and shine onto a white surface.
- What colors results from each experiment? Record them with a photograph and document them in writing.



Activity #2: Subtractive Color Study

Materials: Cyan, magenta and yellow acrylic or gouache paint, surface for painting on, brushes, water container, paper towel

Objective: For the student to understand the subtractive process by using physical paint mixtures.

- Use process colors (cyan, magenta and yellow) in acrylic or gouache paints.
- Create secondary colors by mixing CMY primaries magenta + yellow, yellow + cyan and cyan + magenta. Then mix traditional primaries, red + blue, blue + yellow and yellow + red to make secondary hues.
- Compare the results between the secondary hues made with the process primary mixtures and the traditional primary mixtures.
- How do they differ?
- Now mix all three primaries, CMY or RYB, to make a neutral that is close to black or gray.
- Form them as you see in the image below:



Activity #3: Additive Color on a Computer

Materials: Computer program with color pickers (I will demonstrate in ACC) **Objective:** For the student to see how additive colors intermix. Also serves as an introduction to computer color mixing

- On any computer program, go to the RGB color mode.
- Using RGB sliders, slide the red bar to 100% and the green and blue to 0%.
 What color results?
- Slide all bars to 100%
 - What color results?
- Slide all bars to equal percentages.
 - What color results?
- Slide R and G to 100%
 - What color appears?
- Slide B and G to 100%
 - What color appears?
- Slide R and B to 100%
 - What color appears?
- Experiment with other color mixtures and try to explain all mixtures according to the information covered in this week's lecture.

