## **OLLI Vision and Art**

## Syllabus, Summer 2019

In this lecture/discussion based course, you will learn about the neurobiology of vision through art. We will discuss how our visual system processes light and color stimuli, and how artists (such as Monet, Mondrian etc...) create illusive effects of motion and extra luminance in their paintings by exploiting properties inherent to our visual system.

## Outline of Lectures/Discussions

Weeks 1-2: Vision (with some art) Weeks 3-4: Art (with some vision)

Week 1) Light and the Eye, Luminance and Color Processing

Week 2) Where and What Subdivision of Vision, Central and Peripheral Vision

Week 3) Depth Perception- Perspective, Shading and Chiaroscuru

Week 4) Depth Perception- Stereopsis, Motion Illusions

## **Optional Reading**

- 1) "Vision and Art" by Margaret Livingstone. The course is largely based on Margaret Livingstone's book, so I will post chapters to read as we go along.
- 2) "The Artist's Eyes" by Michael F. Marmor and James G. Ravin
- 3) "Interaction of Color" by Josef Albers