

## School of Architecture

College of Fine Arts, CFA 201 Carnegie Mellon University Pittsburgh, PA 15213



Illustration of participant perception in an immersive VR headset (A. Sawyer research)

48692: Shaping Light through Simulation and Virtual Reality

Units: 9

Instructor: Azadeh O. Sawyer

Light is one of the critical aspects of valued architectural spaces, influencing ambiance, the overall atmosphere, and occupant perception, whether positively or negatively. In this course, we will explore the quantities and qualities of light. We will study how we can design with and for light while understanding the paradox of lighting design—that it is both science and art. Digital design and simulation tools will be augmented with virtual reality (VR) to extend quantitative measurements of lighting to include qualitative aspects of light such as its influence on occupants' subjective impressions of a space, wellbeing and comfort.