Creativity is at the heart of what it means to be human. The course will investigate creativity between and across cultures, utilizing multiple modes of expression to explore the creative process. The course will draw upon the instructors’ and students’ experiences, and it will synthesize different modes of thought to increase creativity and create new mental tools for solving science and engineering problems, as well as addressing the role of creativity across a wide range of human endeavors.

Cognition often sorts itself through the cultural information in your brain. Ways of seeing lead to ways of knowing; impulse and action yield to creative expression, and catharsis can be the result of this cyclical discovery. Aristotle used the term catharsis in a philosophical sense to describe the effect of music and tragic drama on an audience. Originally catharsis denoted the act or process of releasing a strong emotion in an artistic form. This resulted in centuries of discussion, commentary, and debate, which contributed to the development of theories in aesthetics, psychology, cognition, drama, gestalt, and ethics.

We will use thematic cycles (2-3 week units) to understand cognition: the modes of thought and global paradigms that shape how we come to know something; explore creativity associated with that knowledge and how one may come to see poetry, literature, film, art, music, scientific discovery and technological development as a result of artistic inquiry; and reflect multiple ways a cycle comes to fruition with different examples of catharsis while creating our own series of seeing, knowing, and expression. Students will be asked to explore global paradigms and modes of thought with creative and analytical work, to balance critical inquiry and imaginative expression in order to see an issue or theme in interconnected, polymath terms. This course also puts an emphasis on STEM to STEAM initiatives as a way to reintegrate the arts into STEM education.