APS325: ENGINEERING AND SCIENCE IN THE ARTS

This course aims to advance students’ knowledge of art and its connections to engineering and science. Students gain knowledge of selected artists and artistic movements, the theoretical foundations associated with these artists and movements, and an understanding of the ways in which engineering and science are associated with their development.

By the end of the course, students should be able to:

- Identify works of art from different periods and understand how these works are connected to engineering and science;
- Interpret works of art using different theoretical frameworks;
- Create and present an original work of art using the theoretical frameworks learned in class.

INTERSECTIONS:

Earth Art  Sound  Pointillism  Experimentation  Readers:
Interactive Environments  Nano Art  Materials  Modernism  Plato’s attack on art
Perspective  Technology  Mathematics  Post Modernism  Aristotle’s defence
Futurism  Creativity  Sculpture  Manufactured Landscapes  Leonardo’s notebooks
Mimesis  Geodesic  Architecture  Chaos Theory  Apollinaire on Cubism
Medicine  Light  Quantum  Chance  J. Burnham, Beyond Modern Sculpture
Pigment  Cubism  Motion  Immersive Environments  Susan Sontag, Against Interpretation
Jazz  Dada  Circus  

STUDENT WORK:

DELIVERABLES: Each student creates a work of art and presents it to the class. Additionally, each student gives two seminar presentations, writes a critique of an art work studied at a class field trip, and keeps a journal throughout the course.

Students propose to create individual works of art connected to engineering or science.

Students keep personal journals that document all course activities.

Students present their works of art to the class.

Students write a report that further explains the art theory behind their works of art.

Seminar topics have included:
- Constructivism
- Ai Weiwei
- Earth Art
- Marcel Duchamp
- Bauhaus
- Leonardo
- Quantum Mechanics
- Cubism

FEEDBACK:

“The best course I’ve taken at U of T so far, and I’m not just saying that because this course has no mid-term/final exam.”

Unlike my other engineering classes, I did not have to drag myself to attend classes for APS325 since I actually enjoyed learning about the new topics introduced by the Prof. and my classmates in lectures and tutorials.”