



Building Performance Fundamentals Final Project 2022: Charlie Hymowitz, Isabella Yaoran Shi, Selina Yanan Zhou.

**48-116: Introduction to Building Performance**

**Units: 3**

**Instructor: Nathan Sawyer**

This course will introduce fundamental concepts of building physics. The knowledge and skills obtained from this course can be applied to studio projects and beyond, improving building design and performance through standard methods of evaluation and simulation tools. Course curriculum running concurrent with studio projects will aid students in further developing and guiding design decisions to incorporate fundamental concepts related to climate, energy, light, relationship to site, and occupant visual and thermal comfort.

Students will develop a general understanding of, site analysis, building placement & form as it relates to building performance, photometric principles to evaluate lighting conditions, thermodynamic principles, and heat transfer, building energy, renewable and embodied energy. Skills, tools, and knowledge base learned in this course will enable designers and architects to employ sustainable practices at all phases of design, leading to better performing buildings.