**course objectives:**

This seminar explores theoretical grounds behind the making of high-performance buildings (HIPB) and introduces students to tools and techniques of building-in-use and POE performance assessments. The seminar will focus on both conceptual design and evaluation of HIPB in a hands-on learning approach engaging students in my on-going performance evaluation projects of LEED and Green schools in OR and CA.

**assignments:**

1. A comparative case study of the theory/design process of two projects.
2. A focused in-depth evaluation of six green LEED/non-LEED schools in Oregon.

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**high performance buildings: design + evaluation**

A seminar investigating the design process & performance of green buildings

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Much is known about high performance buildings (HIPB) construction and LEED certification but less on the process of their conception or their consumption. Every day innovations in superior-performing building technologies are achieved while ignoring the development of theoretical grounds that guide their application or rigorous evaluation investigating their actual performance. The objective of this seminar is to critically investigate green buildings and test the concepts behind their design. Of equal importance is to test how these buildings actually perform “in reality.” There is a great deal of “green wash” scenarios that proclaim great performance of products and/or LEED and green buildings. In this seminar we will investigate a sample of these buildings and technologies thoroughly to uncover this hypothesis using a systemic framework exploring green buildings physical performance and their impact on the triple bottom line of people, planet, and profit. The seminar will focus on green schools as an exemplar building typology to apply this framework. The course is planned to cover three aspects of HIPB: (1) theory; (2) design process [space (form and mass), surface (envelope), and substance (materiality/details)], and (3) HIPB evaluation and assessment methodologies, tools, and techniques.