

**instructor**

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Architecture

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**meetings:**

meets weekly  
Thursday, 2-5 PM  
Location: TBA

**crn:**

407: 10785  
507: 10854

**readings:**

reading packet  
+ req. book

**credits:**

4cr. hr

**grading:**

graded or P/N

**format:**

interactive seminar with  
illustrated lectures, on-site  
building-in-use performance  
evaluations & POE;  
presentations by design  
teams related to the design  
process/evaluation of high-  
performative architecture.

**prerequisites:**

Arch 4/591, 4/592, 6 cr. hrs  
of 4/584 or concurrent  
enrollment in 4/584 studio.

**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.

# high performance buildings: design + evaluation

*A seminar investigating the design  
process & performance of green buildings*

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.

*photo: Chartwell School, Seaside, BBT Architects*