



## Climate-Responsive Design

**\*ENVS 410M/510M**

Fall 2018

Mon Weds 10-12

Columbia 142

4 Credits

### **Prerequisites:**

ARCH 491/591 recommended but not required

### **Instructor:**

Alexandra Rempel, Assistant Professor  
arempel@uoregon.edu

### **Recommended Materials:**

- *Buildings Without Architects* (John May)
- *Thermal Delight* (Lisa Heschong)
- Field instruments (some inexpensive; others available to borrow)

**How did people design their shelters for thermal comfort, and even thermal delight, before fossil fuels made mechanical heating and cooling possible?** This course explores the world's diversity of climates and biomes, focusing on traditional building practices developed over centuries of experimentation and innovation. These structures are formed by necessity of local wood, stone, skins, leaves, and earth. They are also often assembled to connect human communities with minimal need for transportation, and they have met great pressures to minimize energy use for providing warmth and coolness. As such, they form the great majority of the world's truly sustainable buildings, and they offer fascinating lessons for contemporary green design. The goals of this course are to reveal these lessons, to evaluate existing green buildings in light of them, and ultimately to apply them to the redesign of existing projects. This is a seminar course taught through class discussion and field investigation. Discoveries, insights, and experimentation will be synthesized through weekly assignments and a term project.

*\*This course meets Advanced Building Technology requirements.*