Prerequisites:
• A smaller building from a previous design studio, appropriate for these calculations and design changes;
• ECS I and II or its equivalent;
• Proficiency in the mathematics involved in heat gain and heat loss calculations.

Please do not register for this seminar without these prerequisites!

Our primary focus is on the thermal performance and design impacts of various passive solar cooling and heating strategies. Your term project will investigate a building that you have designed previously. You will calculate its heat loss and heat gain. You will then identify design changes suggested by these calculations.

Final Project Due at Final Exam
Monday December 8 at 8:00 am

TEXTBOOK: 11th edition, Mechanical and Electrical Equipment for Buildings
REQUIRED.

Purchase Course Packet at U of O Bookstore, and bring to first meeting.

Please note:
This seminar combines passive solar heating and passive cooling. As a result, there will be two complete sets of calculations, and many design strategies investigated during our nine weeks of class. We will several times shift focus between heating and cooling.