Courtyards: Aesthetical, Social, and Thermal Delight
(Thursday, November 2\textsuperscript{nd}, 8:30 AM to 12:30 PM)

Preliminary Assignment: Build a Courtyard Model and Sun Peg Chart Before the Workshop

Courtyard Model:

- *Your foamboard or cardboard courtyard model* should be constructed at $\frac{1}{2}$ " = 1 foot scale.

- The open courtyard floor area should be a flat rectangle of approximately 500 square feet.

- In addition, the arcades or colonnades on each side should be 8 to 10 feet deep.

- Their height is up to you; traditional courtyard buildings have rather high ceilings.

- You can choose to have either one or two storeys, or a combination, on the four sides.

- The rear walls of the arcades should be without openings, and be removable.

- Elaborate façade or floor patterns are not necessary.

- You can add a fountain and or vegetation, as you see fit; they should be movable.

Model Base and Sun Peg Chart:

- The base of your model should project beyond the arcades for about 4 inches on each side. This is to allow a sun peg chart to be used with your model.

- Thus, the overall model base will be about 30 inches square.

- The *sun peg chart for 36° NL* can be found on page 1536 of the 10\textsuperscript{th} edition of Mechanical and Electrical Equipment for Buildings. For your convenience the chart is included on the following page. The chart should be movable to any edge of your model. Be sure to mount the sun peg so that it remains perfectly vertical.

- For additional information on how to construct and use the sun peg chart please consult on the workshop’s reader: *Chapter 5: Solar Geometry and Shading – Solar Geometry* (Moore, 1993).