

me162 – Building Systems

Week 5 Tutorial

The week, as with last, will be focused on *Psychrometrics*.

Psychrometrics – second week

- a. Work through the remaining examples in the Psychrometric Summary handout given to you a week ago.
 - Look at Example 1 – Heating and humidifying
 - Look also at Example 3 – Finding the supply air condition

- b. When determining the condition of the Supply Air one must know something about the SPACE heat gains and space heat losses. We will look at heat losses in a few weeks but for now ... let's concentrate on 'Interior Spaces'. They create heat gains only. The heat gains come from people, equipment and lighting (plus whatever else is generating heat). Some data on the amount of heat given off by people and equipment is provided in tables online.

- c. Review the HVAC Procedure handout (online too). It gives a typical, step-by-step procedure that ends with the specification of the HVAC equipment necessary to keep a space's air conditioned (cooled, heated and humidified).

- d. Use this classroom as an example space, with the number of people and lighting we have in here right now and work out a specification for the HVAC equipment needed to keep you comfortable. List the step-by-step results on the board.