## CLASSROOM DESIGN PROCEDURE (2011, burl.crone@utoronto.ca)

- 1. Establish type of room and capacity you require (room type PDF)
- Use Space Allocation PDF for approx room area (NASM = Net Area in Square Meters)
  Rule of thumb: seminar room (group) is 2 NASM/Student, lecture room (rows) is 1.5 NASM/Student
- Sketch out room as a squarish retangle. Estimate Width and Depth to meet your NASM (100 NASM room could be 10x10, or 8m wide x 12m deep)(1m = 3.3 feet, 1m2=10.1ft2 approx)
- 4. Divide room depth by 4. This is your approx projected image width.
- Assume 4:3 aspect ratio for projected image. Image height will be image width times 0.75.
  Image height = (room depth/4) x 0.75
- Add 5' (want projected image no less than 4'6 from floor. Need 6" for screen housing).
  If you are able to inset the screen housing above the clear ceiling level, add 4'6
- 7. This is your ceiling height. You are done. You have approximate room size, shape and required clear ceiling for digital image projection. You also know the screen size.

## REFINE

- 8. Sketch in your furniture. Leave min 2'6 between rows of tables, and 3' aisles (or perimeter circulation). Instructor area min 8' deep, min 16' wide. Fixed seating is 2' width, loose is 2'6. Tables 18" 2' deep.
- 9. Adjust NASM and room shape to comply with (8) & (9), adjust screen size if room depth has changes, and adjust ceiling height if screen size has changed.
- 10. Check that 100% of students within image viewing cone standard (see PDF) adjust room depth etc if required
- 11. Sketch final room plan and an elevation of the room front with blackboard and screen(s)
- 12. Sketch reflected ceiling plan showing light fixture zones
- 13. Sketch plan showing location of power outlets, light switches and the A/V control area (data and power)
- 14. Give your sketches to the architect. In all likelihood, you will be rewarded for your hard work by getting pretty much exactly what you wanted, because you have just made their job much, much easier

