Disruption in the Classroom
Faster
Better
Cheaper
Wake Forest University Space Planning Guidelines

The space factor formula used is:

\[
\text{Space factor} = \frac{\text{Station size}}{\text{Hrs. per week} \times \text{Occupancy Rate}}
\]

The space factor is then multiplied by the Weekly Student Contact Hours (WSCH) to produce the ASF required for classrooms.

For example:

\[
\frac{20}{25 \times .65} = 1.23 \text{ factor}
\]

Therefore 6,000 WSCHs would require 7,380 ASF of classroom space (1.23 x 6,000).

This formula calculates the total classroom space requirements. While the average station size being used is 20 ASF, the University will require a wide variety and size of classrooms. Some rooms may be 15 ASF per station, others may be 30 ASF or higher per station. The average station size is reflects current conditions, and recognizes recent trends in instruction based on more group discussion and to provide greater flexibility in room furnishings and layouts to accommodate a variety of learning methods. The recommended weekly hour usage rate represents current scheduling conditions as well. The following layouts provide examples of various classrooms.
Old “Space Drivers”

- How Many Students?
- (Some pre determined square foot assignment)
- Rows of chairs/tables
- Modest circulation
- Little re-configurability
- Single front facing focus
How does active learning change space planning and learning space design?

- Not teacher focused
- There is no “front of the room”
- Shift from single node to multi-nodal environment (more fronts)
- Activities less structured
- Students move around more
- Different furniture arrangements
- More circulation space
- Classrooms become larger
### Active Learning – New “Space Drivers”

<table>
<thead>
<tr>
<th>Overall Group Size</th>
<th>Breakout Group Size</th>
<th>TABLE SHAPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many participants at each table?</td>
<td>(5,6,7,8,9)</td>
<td>Rectangular</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Circular</td>
</tr>
</tbody>
</table>
# Alternative Furniture Arrangements

<table>
<thead>
<tr>
<th>No. of Students</th>
<th>Furniture Arrangement</th>
<th>Table Shape</th>
<th>NSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>Theater</td>
<td>Rectangle</td>
<td>795</td>
</tr>
<tr>
<td>36</td>
<td>Active Learning</td>
<td>Rectangle</td>
<td>820</td>
</tr>
<tr>
<td>36</td>
<td>Active Learning</td>
<td>Circular</td>
<td>955</td>
</tr>
</tbody>
</table>
Other space impacts

• Do we need as many large lecture halls going forward?
• Where and how will we create the on-line content?
• Importance of lecture capture an video origination?
• How can we design larger classrooms to be more “interactive”?
Learning Commons
Informal Learning Spaces
Small Group Study Rooms
Learning Everywhere
Remote Collaboration
Planning for the Future