General Teaching Space Allocation Methodology

This document intends to explain the methodology behind the assignment of General Teaching Space (GTS) to academic course sections.

Departmental Zone Room Allocation Model

The Departmental Zone Room Allocation model replaces the Tier 1/Tier 2 model for room allocation. Academic units are asked to identify a centroid for each of their course codes, creating a unique zone for each course code. Wherever possible, sections are scheduled within a 400m distance from that centroid. This does not apply to sections scheduled in Restricted Teaching Space (RTS).

Travel distance

- Travel distance is calculated using building locations and travel paths from UBC Geodata (https://github.com/UBCGeodata).
- Travel paths are calculated from the identified centroid building.
- All rooms in a given building are assumed to be located at the geographic centre of a building and on the ground floor.
- All GTS rooms in buildings within a 200m distance from the centroid are designated to the Primary Zone.
- All GTS rooms in buildings within a 400m distance from the centroid are designated to the Secondary Zone.

Overlapping zones

• Rooms may be designated to more than one Departmental Zone if Departmental Zones overlap.

Exceptions

- There are instances where course sections cannot be scheduled in their zone for several reasons, including room features and planned size.
- Due to limited rooms with capacity of 300+, these rooms are excluded from zones and sections with a planned size of 300+ are scheduled manually.



• If there are instances where an academic unit may want a course section to be scheduled outside of their zone, they can indicate this preference in the Web Data Collector (WDC) comment box for the course section.

Academic Course Scheduling Process

Scheduling Services will assign GTS in batches, while taking into consideration the following components:

- Departmental Zone Room Allocation Model
- Pedagogical requirements
- Room feature requirements
- Accessibility requirements
- Seat alignment target

Course sections are assigned based on Scientia Planned Size as follows:

- 1. Course sections with accessibility accommodations
- 2. Course sections of Planned Size 300 and above
- 3. Course sections of Planned Size 250-299
- 4. Course sections of Planned Size 200-249
- 5. Course sections of Planned Size 150-199
- 6. Course sections of Planned Size 100-149
- 7. Course sections of Planned Size 70-99
- 8. Course sections of Planned Size 60-69
- 9. Course sections of Planned Size 50-59
- 10. Course sections of Planned Size 45-49
- 11. Course sections of Planned Size 40-44
- 12. Course sections of Planned Size 35-39
- 13. Course sections of Planned Size 30-34
- 14. Course sections of Planned Size 25-29
- 15. Course sections of Planned Size 20-24
- 16. Course sections of Planned Size 10-19
- 17. Course sections of Planned Size 1-9
- NOTE: According to the UBC Booking Guidelines for General Teaching Space, adhocs are processed after the Academic Course Schedule is published.



Starting with Course Batch Group 2, Scientia attempts to bulk schedule all course sections within the group (e.g. 250-299 sections size). During the bulk room assignment process, some sections may not be scheduled due to a variety of constraints resulting in unassigned sections. Unassigned sections are manually adjusted by Scheduling Services and assigned a room before moving onto the next Course Priority Group.

For each unassigned section, Scheduling Services will take the following steps to assign a room:

- 1. The unassigned section is checked for any issues or mistakes that could be preventing it from scheduling
- 2. Unassigned Section Management Survey (academic units submit as part of scheduling process) is reviewed and course section is adjusted based on survey response.
- 3. If there was no Unassigned Section Management Survey submitted by the department then the course section is adjusted according to the following default priority order:
 - a. Removing the zone
 - b. Removing one or more room features
 - c. Decrease planned size to match previous year's enrolment (if applicable)

Batch Review

A batch review is performed by Scheduling Services staff after each batch group is scheduled and before the draft timetable is published. Examples of adjustments that can be made include moving a section to a room that matches its planned size more effectively than where it had been bulk scheduled, and reviewing the WDC comment box to ensure that requirements are met when possible.