

CLASSROOM RENEWAL, SCHEDULING, AND UTILIZATION

Summary of Fall 2007 – Spring 2008 Issues and Responses

Prepared by:
Joe Orlins

Assistant VP, Facilities Planning, Construction, and Operations

1. Background

Rowan University has about 185 learning spaces that are regularly scheduled for academic coursework meetings, ranging from small seminar rooms to large auditoria, from art and dance studios to computer labs. Some of these spaces are considered ‘General Purpose’ rooms (which can accommodate nearly any lecture-based course); others are department-specific (such as laboratories and studios). In addition to the regularly-scheduled rooms, there are several spaces on campus that are scheduled by individual units on campus for meetings, events, or other activities (e.g. Library meeting rooms, conference rooms in Education Hall). When these non-traditional spaces are counted, the total number of rooms available for courses is 200. The sizes of these rooms are summarized in Table 1.

Table 1: Summary of Room Types and Sizes

Room Size	# General Purpose Rooms	# Non-GP Rooms	Total # Rooms
<= 16	15	13	28
17 - 24	32	34	66
25 - 30	33	34	67
31 - 34	0	3	3
35 - 42	16	5	21
> 42	6	9	15
Total	102	98	200

While some of these learning spaces are new (e.g., those in Education, Science, and Rowan Halls), many more are in the University’s older buildings (e.g. Bunce, Wilson, Robinson, Bozorth, Westby). In most cases, learning spaces in the older buildings have historically been neglected, with minimal renewal of furniture, paint, carpets, and other finishes. These were the areas deemed to have the greatest need of renovation, and were prioritized accordingly.

Almost 50 general-purpose classrooms in Bunce, Robinson, and Wilson halls were renovated in the summer of 2007, and another 18 classrooms in Bozorth, Westby, and Savitz received upgrades over the winter break in January 2008.

2. Room Capacities & Amount of Furniture

Historically, many classrooms in older buildings had been “stuffed” with as much furniture as they would hold, often exceeding 35 or 40 seats in a classroom to accommodate large course sections. A decision was made to limit the number of seats in renovated classrooms to that which is reasonable under fire safety regulations.

Because the Fall 2007 class schedule had already been set, a commitment was made to attempt to minimize disruptions of relocating courses. This led to a short-term solution of installing excess furniture into many of the GP classrooms in Bunce, Robinson, and Wilson for the fall term. The resulting crowded conditions led to a decision to “right-size” the classrooms over the winter break. Approximately 270 seats were removed from almost 40 classrooms in these three buildings.

The impact of reducing the capacity of classrooms on Spring 2008 courses was immediately apparent. Almost 300 course sections exceeded the new capacity for the rooms that were initially assigned. Room reassignments were done manually, with as much care as possible to ensure faculty did not have to change buildings between classes (if they had back-to-back meeting times), and that there was similar technology (PC, projector, etc.) in reassigned rooms.

Unfortunately, there were too many large courses (those with > 30 students) scheduled at peak times (Mon-Wed and Tue-Thu mid-day), and not enough large rooms to accommodate so many sections. Even when non-traditional learning spaces (*i.e.* Library meeting rooms, Linden Training Room, etc.) were scheduled, there were still more courses than appropriate-sized spaces available.

The complete matrix of all scheduled learning spaces and the number of students enrolled in a course in each space for each scheduling period is included as Attachment 1.

The overall utilization of learning spaces (calculated as the ratio of scheduling blocks used to scheduling blocks available) for all learning spaces and general purpose classrooms is shown as a function of time of day for Spring 2008 in Figures 1 and 2.

The effect of the Monday open period (and the Wednesday echo) is dramatically apparent. The peak daytime utilization for general purpose classrooms is over 70%, and occurs Monday through Thursday, during the 9:25-10:40 and 12:15-13:30 scheduling blocks, and Tuesday-Thursday during the 10:50-12:05 time block. Utilization is also high in the evening (courses starting after 6:30 pm) every day except Friday.

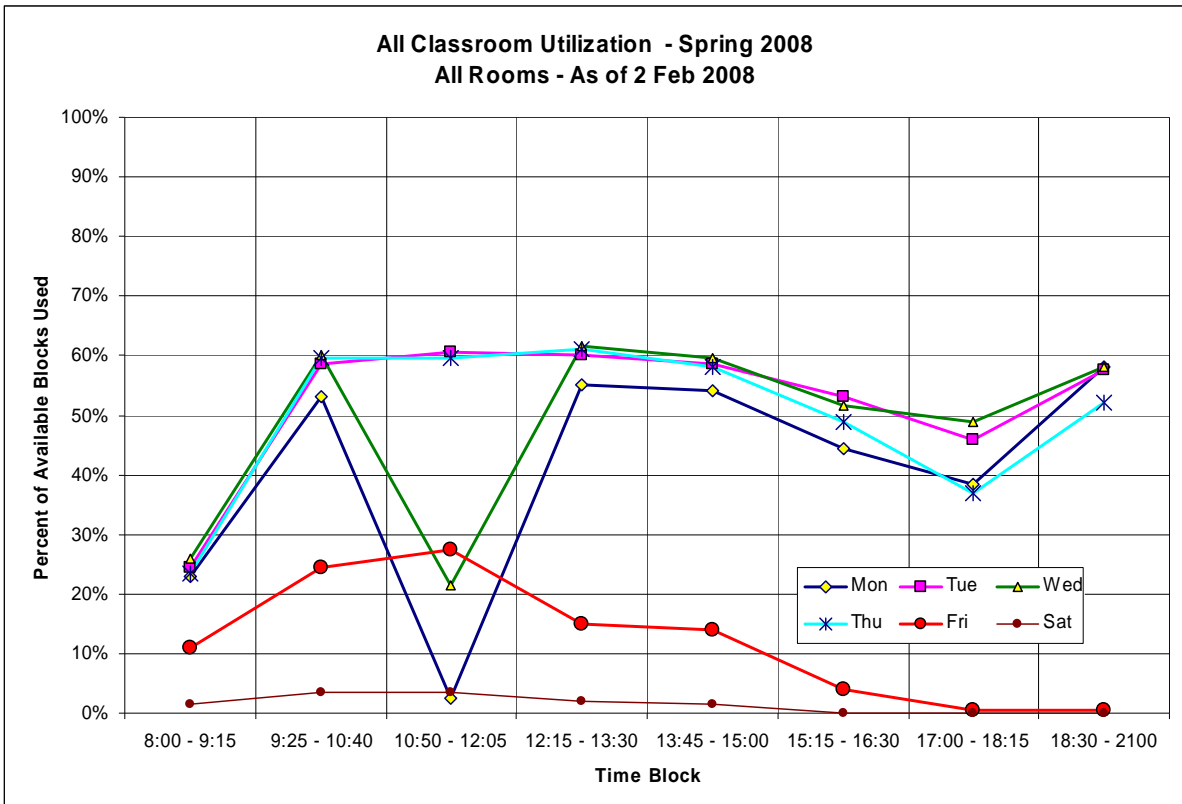


Figure 1: Overall Learning Space Utilization, Spring 2008 (200 rooms)

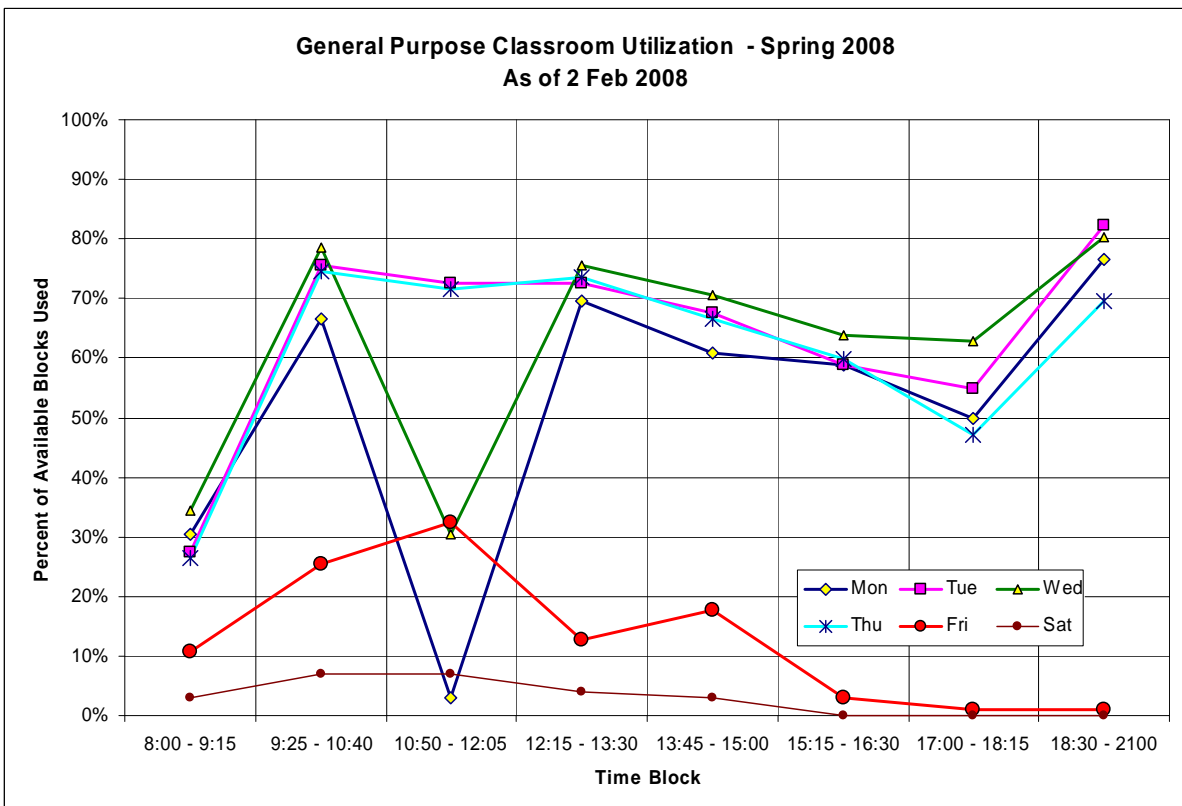


Figure 2: General Purpose Classroom Utilization, Spring 2008 (102 rooms)

A decision was made to re-install excess furniture in *some* of the general-purpose classrooms for Spring 2008, to accommodate the students enrolled in courses scheduled in those rooms. Most of these consisted of addition of less than four extra chairs and two tables. A handful, however (~10) consisted of adding at least 12 seats.

Figure 3 indicates the number of course sections that exceed the established room capacity. In addition, the numbers of sections that have enrollments that exceed the department-specified section caps are shown. There are a total of 182 sections that exceed the established capacity for their assigned rooms. Almost half of these have one or two students over the room capacity, and over 70% of these have enrollments of five (or less) over the room capacity. In comparison, there are 370 sections that have enrollments greater than the department-specified caps. Of these, over 60% have enrollments of 1 or 2 over the stated section capacity.

The discipline with largest number courses affected by the room capacity issue is PHED (14 courses), followed by CHEM, HIST, MATH, PSY, and SOC (each with at least 10 courses that exceed established room caps). Similarly, the discipline with the largest enrollments over the stated section capacity is PSY (19 courses over section caps). Others with at least 10 courses over the stated section capacity caps include ADV, ART, CHEM, CMS, COMP, ENGR, HIST, HLTH, MATH, PHED, PHYS, PR, RTF, SOC, and SPAN.

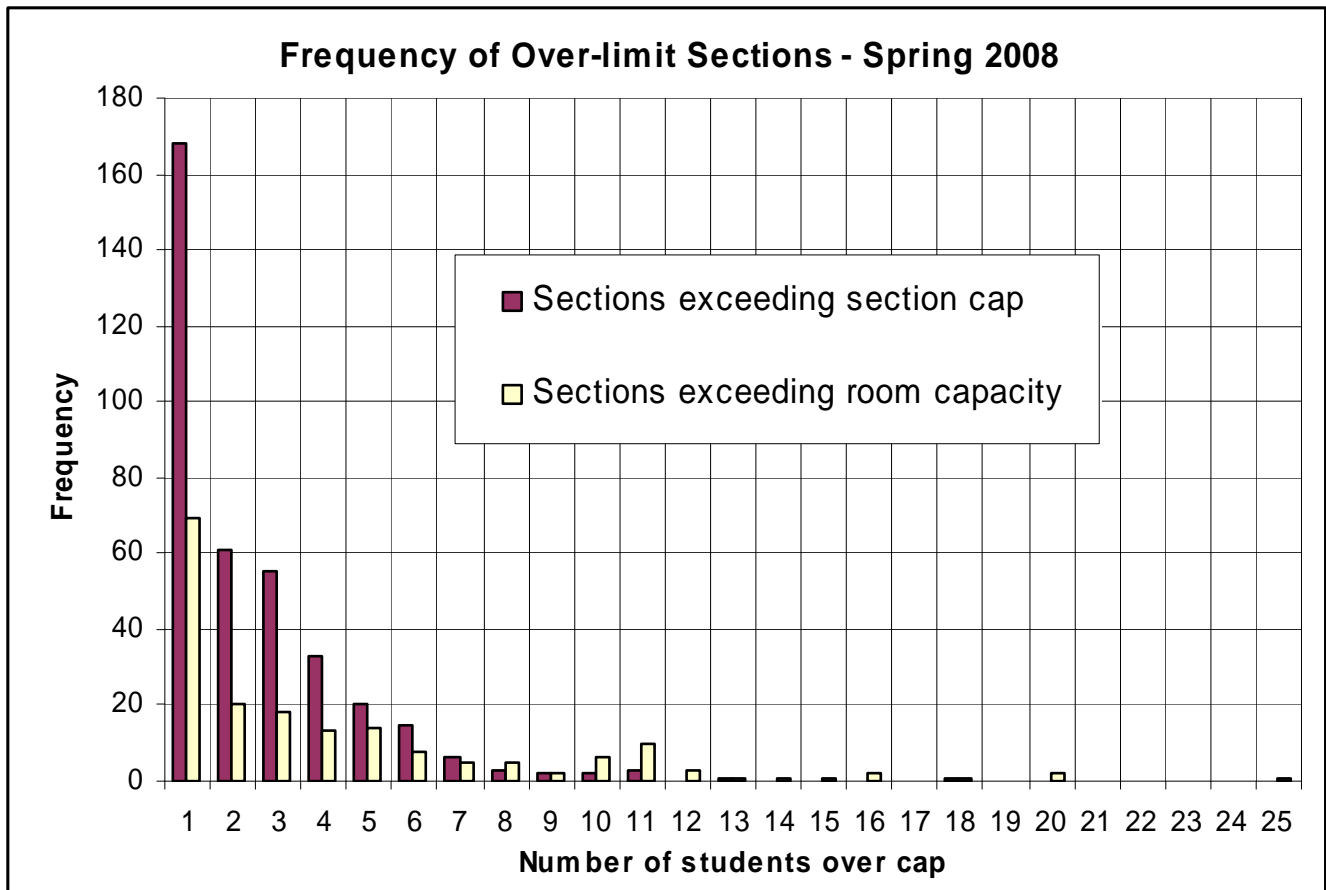


Figure 3: Frequency of Over-Limit Sections, Spring 2008

3. Associated Problems

There were several problems encountered as a result of the scheduling of the 'non-traditional' learning spaces for Spring 2008 courses. These can be grouped in 3 categories: furniture-related, access-related, and technology-related.

a. Furniture-related issues

Most of the non-traditional spaces had furniture of one sort or another, but not all had appropriate writing surfaces (e.g. whiteboards).

Library 126 and 226: These are general University meeting rooms, and have folding tables that can be set up in a variety of layouts. While this was done for room 126, room 226 was somehow overlooked for the first week of classes. Portable whiteboards were brought in for these two rooms, and additional whiteboards are on order. There is a desire from some of the faculty that use these rooms for regular classroom furniture to be installed.

Human Resources Training Room (Linden Hall): New classroom furniture was installed in this room, and will remain after the end of the semester.

Education 3014: This large meeting room has only one medium-sized whiteboard at the front of the room. Additional whiteboards will be installed this week, to aid in teaching advanced mathematics courses.

General Room Overcrowding: The rooms that had additional furniture added to accommodate the existing courses for Spring 2008 are indeed crowded. In particular, Bunce 321, Robinson 121, 227, 305, and Wilson 105, 203, 204, 205, and 206 have substantially more seats than desired. Given existing space constraints, it is unlikely to fix this problem for the current semester.

b. Access Issues

Access to some of the non-traditional spaces has been problematic. The two meeting rooms in the Library (126 and 226) have electronic locks on the doors, which are manually turned off by staff at the Library circulation desk. The two classrooms in the Library (401 and 403) also have electronic locks, but these are in need of repair. The repairs are scheduled to be done by the University's service contractor for alarms. In the meantime, the doors are manually unlocked and locked by Library staff.

There have been few problems with access to the Linden Hall HR Training Room. Staff from Human Resources unlocks the room in the morning, and re-locks the room in the evening after classes have finished.

c. Technology Issues

Computer Equipment: There have been reports of malfunctioning computer equipment in Library 403 (broken projector, slow computer). These have been reported to the Library staff and Instructional Technology Services (ITS). Some faculty have complained that they are no longer assigned to Technology Enhanced Classrooms (TEC rooms), or that a room considered as a TEC room has no computer (only a projector). This is an institutional issue. Ideally, all learning spaces

(at least those that can support a regular lecture-based course) should have appropriate LCD projectors (at a minimum) and integrated computers where appropriate.

Audio-Visual Equipment: There has been a desire from some faculty for TVs and VCRs to be re-installed in some classrooms (or made available on portable carts). Instructional Technology Services has had a policy in place for several years of gradually phasing out VCRs because of limited availability of replacement hardware. (Three or four combination TV/VCR units were removed from Robinson Hall at the request of ITS during the initial phase of classroom renewal.) The preferred solution is conversion of videotapes to DVD format. In the near-term, ITS will make the combination units removed in the Summer of 2007 available on carts for faculty that have a need for use of that type of media.

4. Recommendations

a. Course scheduling

Similar room capacity issues exist for the Summer 2008 and Fall 2008 terms. Attachments 2 and 3 show the currently scheduled section caps for each learning space throughout the week for these two terms. While a detailed analysis has not yet been conducted, it is apparent that many courses will need to be re-scheduled to new rooms. **The question remains whether to do room reassignments before the start of student registration, or after the majority of students have registered.**

Regardless of when the room reassignment is done, it could be done manually (as has been the case in the past), or using the new Schedule 25 module of the R25 software package currently being implemented. *Ideally, both methods would be pursued simultaneously, and as soon as possible.*

In addition, **scheduling control for all learning spaces on campus should be vested with the Registrar's office.** While individual departments or colleges may need control over certain specialized rooms (e.g. studios, laboratories), most spaces on campus do not fall into this category.

b. Room availability

Ultimately, the University does not have enough general-purpose classrooms that seat at least 35 students. To address this issue, there are several things that can be done.

Re-schedule Open Period: It is recommended that the Open Period be moved from Monday morning to Friday afternoon. This will allow greater use of classrooms at peak times on Monday and Wednesday mornings. This solution may take substantial time to implement, depending on the process used for re-evaluating the academic schedule.

Reassess room capacity for existing classrooms: The evaluation of room capacity for safety concerns was initiated for the classrooms undergoing renovation. Facilities Planning & Construction will re-evaluate the capacity of classrooms in our newer buildings (e.g. Education Hall, Rowan Hall) and buildings renovated within the last 10 years (e.g. Hawthorn & Savitz Halls). It is quite likely that additional seats could be added to some rooms, especially in Education Hall. On the other hand, it is possible that there should be a reduction in seats in some classrooms, such as those in Hawthorn. This is a relatively short-term solution.

Create additional larger classrooms: Facilities Planning & Construction will evaluate the feasibility of creating larger classrooms by removing walls between adjacent small classrooms (such as those in Bozorth, Wilson, Robinson, and Bunce Halls). This is a much longer-term solution, and will not be able to be implemented for Fall 2008.

c. Technology

All general-purpose classrooms (and most laboratories) should be equipped with an LCD projector, (at a minimum) and ideally with a computer and podium tied to the campus network. In the absence of a computer in each room, faculty can at least bring a laptop to the room and plug in for presentations, DVD movies, etc.

