

Math Department Building Requirements

This Version: July 1, 2020

The Math Department Love Building Renovation Committee (Bellenot, Boyd, Kercheval) worked with Computer Science and the College of Arts and Science over a couple of years on floor plan ideas for the liberated space in the Love Building.

The purpose of this memo is to articulate the use needs of the Department, inherent in the previously submitted joint space proposal, but not explicitly spelled out before. We hope this will be useful to third parties in the design process.

1 Department summary

- 74 private offices, including faculty and staff, described below
- Around 60 spaces for graduate student instructors (GSI), properly configured – see below
- 27-30 1st year TAs need to share a space (not included in the 40-43 number)
- Conference rooms, common rooms, advising areas, storage rooms, copier/printer rooms, kitchen area – equal to or greater than what is currently available. (We are currently under-resourced in advising areas, common rooms, storage rooms.)
- Math computer lab with similar capacity.
- Computing resource spaces similar to or greater than what is currently available, near the servers

2 Space needs and requirements for offices

2.1 Graduate Faculty: 42 private offices

Currently the graduate (research) faculty uses 40 private offices; we are requesting 42 to accommodate research visitors and room for some expansion.

Faculty offices require wall space and room space to use a whiteboard or chalkboard in conversation, space for three visitors chairs, and space for bookshelves. Room for a second table would be very useful.

2.2 Dean's Postdoctoral Scholars: 8 private offices

These are funded as teaching positions and have the same space needs as the graduate faculty.

2.3 Teaching Faculty: 11 private offices

Nine of the twelve are Basic Math faculty currently housed in MCH. They teach high volume service courses with large enrollments of multiple hundreds, and have special needs. They need nearby larger spaces to run help group sessions. Computer access is needed, as currently in MCH 110. They also need tables accessible where they can put students to work on something like tests, and where groups of up to 10 students can be set to work. Having this available nearby in the same building is a major aid to productivity.

2.4 Specialized Faculty: 1 private office

The Director of Computing Resources needs an office near the LOV basement server rooms. (Also a shared space for his staff.)

2.5 Administrative staff: 3 private offices, plus shared space for 3 more

Of six administrative staff, at least 3 private offices are needed for the office manager, the travel coordinator, and the HR coordinator, since they often deal with confidential HR matters. The other three need at least adequate shared space.

2.6 Advising staff: 3 private offices plus waiting area

The advising staff works under overload conditions and must have private offices. Currently students wait out in the hallway – a proposal incorporating a waiting area is needed.

2.7 Adjuncts: 2 private offices

We currently have 4 adjunct instructors to meet demand; this number can fluctuate.

2.8 Hussaini staff: 2 private offices

Husseini has his own funding for a few postdocs and currently occupies space in MCH.

2.9 Computer support staff: 1 large shared office space

We need 4 employee seats, and also a repair workbench and storage area either incorporated or nearby. Currently the System Group office is in 003, with 004 and 004A used for workbench and equipment storage space.

2.10 Retired faculty: 2 private offices

Retired faculty are normally given shared office space. We currently have four, the number fluctuates.

2.11 Graduate Student Instructors

Of approximately 100 graduate student instructors and research assistants, about 25 are first year students who are given a large shared space. They work as lab assistants and need a place to hold office hours.

Each year we have about 40 or so graduate students who are not just TAs but instructors of record for a math course. They share small offices of 2 or 3 grad students, with nearby common space available for conferencing. Example: 401A MCH, with the 401 MCH common space. The research/teaching needs of these GSIs (both TAs and IORs) benefit from a limit of 3 or 4 on the number of student sharing an office in a productive way. Research in

mathematics benefits from being present for conversation. Too many people sharing one room will drive people out and lower productivity.

3 Classrooms

Classrooms need chalkboards or whiteboards on multiple walls – the more the better. Also document cameras/video projectors that will display computer screens. Furniture should be flexible so that it can be easily reconfigured for group work, active learning, or traditional lecture.

A help session room like 110 MCH is needed to support gateway basic math course instruction. We also have a high priority need for an Actuarial Science tutor room. Currently we use 216 MCH, but that room continues to be too small; a room the size of 112 MCH would be closer to meeting the need.

4 Common rooms, meeting rooms

Common rooms for social gathering are essential in mathematical culture. The fifth floor is a prime opportunity for this.

We also need meeting rooms for committee work, interviewing, etc.

5 Storage, Copiers

Conveniently placed rooms with copy machines and shared printers are essential. Storage rooms are needed for materials that are not used continuously, such as Math Fun Day materials, or departmental records and supplies.

6 Computer Lab, System group needs

Math student computer lab with similar capacity, either 10 or 14 workstation-equipped seats plus a few additional seats/tables for laptop users. Note we currently have 10 workstation-equipped seats in Love, 4 more in MCH.

7 System Group office/storage

Office space for the Mathematics System Group is currently in the basement near the 005B data center area that is shared by CS and Math. Ideally they would be located in the same air conditioning zone as 005B, so the office space in 003 and the network room 004A. Such a location provides advantages with respect to support and related equipment storage, and also allows the Mathematics System Group to continuously monitor the status of the critical air conditioner that serves 005B and 004A (that a/c is located in the back of 003).

(side note, too much detail: It would be difficult to renovate those spaces into normal office space due to the way the special air conditioning is set up for the data center area. The 005B data center and also 004A networking room both need to be very cold and very loud with respect to air conditioning. The 004A networking room is typically 55 degrees Fahrenheit. That same air is then pumped into 005B, where it cools the Math/CS critical IT infrastructure.)

Additional comment: we will need FSUSecure wifi extended throughout the building.