



MAKERSPACE IMPLEMENTATION PLAN

Facility Study UPDATE (First Revision)

CCC Maker Project (CCC InnovationMaker3 Grant)

SCC Makerspace Planning Team
March 14, 2017



SUMMARY

New Makerspace Facility Space Possibilities on SCC Main Campus

In the first facility study I prepared, dated Feb. 26, 2017, we discussed the various spaces that could possibly host a maker pace facility here on main campus.

At the time, the general consensus was to start with a “Phase I” the small classroom at the east end of the Technology Building, Rm. T-110. It has it’s advantages, although small at just 750 sq. ft. The advantage is it could be linked to the Design Lab next door in T-109, with a passageway and interior windows, etc. It would require moderate upgrades to electrical, ventilation etc. The other potential spaces around campus previously considered were ruled out due to physical restrictions and the cost of upgrading the infrastructure.

Engineering Design Technology (EDT) Student/Tutor Mat Vandiver developed a tentative floor plan for Room T-110 and he and I met with Margaret Lednicky in OPS and brainstormed solutions, knowing that expansion to a larger space such as the Temp 01 Building may just not be possible, even down the road. We looked at finding a place on campus where we could have a home for this facility for a decade or so.

The first consensus was to use the two classrooms at the the west end of the Tech. Bldg, Rooms T-100, and T-101. Both are currently computer lab-style classrooms, with tall ceilings, and about 1000 sq. ft. each. T-100 is used heavily by GCOM, T-101 is used solely by EDT, less frequently. It was also determined that adjacent classrooms T-102 and T-103 are used minimally, if at all, and both are computer lab-style classrooms now.

Could GCOM and EDT move “down the hall” to T-102 and T-103, similar-sized classrooms, and free up T-100/T-101 for a future Makerspace spanning two classrooms totaling about 2000 sq. ft.

I talked with GCOM faculty and it was pointed out that the T-102/T-103 classrooms are fine, but the ceilings are low in T-103, as they have a floor above them, and this really effects the projector and the size of the projection on the screen there. Maybe T-102, but then another solution developed that seems simpler, smoother, and GCOM faculty are fully supportive.

Using Cosmetology Building classrooms COS-108 and COS-110 for our Makerspace

These two classrooms, located at the southern end of the Cosmetology Building, are used primarily by GCOM. COS-110 and COS-108 both have tall ceilings, interesting architecture, and slab floors. COS-110 is a computer-lab style classroom, used heavily by GCOM courses. COS-108 is a “tables with chairs” style classroom, with an instructor media station. COS-110 has linoleum and COS-108 carpet. Both classrooms have projectors. COS-108

is lightly used by GCOM, for lecture style courses, and for student work requiring large tables etc. In addition, each classroom has an adjoining connected office, both used by GCOM. The rooms are connected with an interior door in the common wall between them.

Historically, these two classrooms in the Cosmetology Building once hosted the printing trades department here on campus, where students learned commercial printing, and the rooms were outfitted with printing presses, paper cutters, supplies, and all the tools of the trade for this industry.

In discussions with GCOM Professors Pat Crandley and Don Button, both were quite enthusiastic to have the makerspace be located here. Both have suggested it would be a better arrangement to have all of our GCOM classes in close proximity, all in the Technology Building, as our Design Lab is there, Division Offices, etc.

Room T-101 would be an ideal replacement for COS-110, for GCOM courses

If GCOM courses currently held in COS-110 could move over to Rm. T-101, in the Technology Building, next door to T-100 (GCOM's heaviest use classroom), it would make so much sense. T-101 is almost an exact duplicate of T-100, in size, etc. and is currently a computer-style classroom used occasionally by EDT.

EDT Professor Ken Fitzpatrick currently uses T-101, which is a mirror image of T-100. So if we could move Ken's EDT courses one door down to the rarely used T-102, or T-103, we would be set. T-103 could be converted back to a traditional classroom space with tables and chairs, since it has lower ceilings, and could be used by classes taught by a variety of departments that need a basic classroom. Please note that all these Tech. classrooms have one or two offices attached for potential faculty use.

GCOM still needs a traditional lecture classroom, to replace COS-108, and it could be T-103, shared with others, or possibly T-110 would do it, the skinny room next to the Design Lab, that we initially considered for the makerspace. That room is so underused and odd shaped. Ideally, Chris Seddon mentioned he would love to expand his very busy Design Lab into T-110, and maybe ultimately an interior doorway, and some fixed windows on the common wall could create a great flex space, classroom area for both the Design Lab and regular classroom usage for multiple departments. (I know that is outside the scope of the makerspace, but mentioned it because it came up from Chris).

CONCLUSION

Of all the available options, it seems that using COS-108/COS-110 as the new makerspace facility gives us ample room, about 2000 sq. ft., and a home to have for years to come. It also has faculty on board (note that I have not discussed this with any admin other than Gabriel and Margaret). The rooms are conveniently located, on the corner of Freeport Blvd. and 12th Avenue, the two classrooms are isolated from the other Cosmetology classrooms. It has convenient access to two unisex bathrooms, is handicap accessible, and has a covered area with a display case also. I am attaching photos of spaces mentioned in this report.

BACKGROUND

WHAT IS THE CCC MAKER PROJECT?

The California Community College CCC Maker initiative will drive innovation in education and prepare students for success in STEM/STEAM careers that demand 21st Century skills. Colleges will build makerspace communities, faculty will embed making into curriculum and employers will provide internships, all supporting students to explore, create and connect with opportunities.

Sacramento City College has been tasked to develop its own unique Makerspace Implementation Plan, to be submitted in late May 2017, for consideration of future funding and the development of our facility.

CCST/CCCCO Makerspace Facility Recommendations

Based on CCST's background research, 4,000 square feet is often considered a minimum, while 6,000 – 10,000 square feet is preferred, though some spaces have started with less than 1,500 square feet; this will vary depending on the needs of the individual makerspace and the anticipated uses and student flow.

Various potential uses may need separate sub-spaces:

- Incubator offices for startups
- Co-working environment that could be repurposed for event space
- Private meeting rooms
- Separate rooms for equipment such as computers vs. equipment that generates dust and fumes
- Soundproof room for CNC machines

Also consider the infrastructure necessary for the equipment:

- High-speed internet
- Dedicated power lines to equipment with high electricity needs
- Electrical outlets, both 110 and 220 volt
- Dust control, exhaust, air circulation

Views of south end of Cosmetology Bldg, housing COS-108, COS-110, offices, bathrooms



Other exterior views of south end of Cosmetology Building



Interior views of classroom COS-110



Interior views of classroom COS-108



Interior views of classroom TEC-101

