

Needs

Mathematics Department



The Mathematics Department is currently housed in cramped and sub-standard space in Old Main. It needs twice the office space it has right now, plus additional computer teaching labs and student lounge space. Courses are still taught in general classroom lecture spaces, while other Math Departments nationally are using more computer labs. The department currently has a total of 14,985 ASF, all in Old Main. The total proposed space target for the Math Department is **29,246 ASF**, a growth of **95%**.

Its relatively low-tech needs make the Math Department a perfect fit for either the Life Science or Physical Science Buildings, two locations closer to the center of the academic core than Old Main.

Departmental Space Calculation - ASF Math

Room Category	Room Type	EXISTING			PROJECTED			FINAL TARGET		NET GROWTH	
		WSCH	ASF/ WSCH	ASF	WSCH	ASF/ WSCH	ASF	ASF	COMMENT	ASF	PERCENT
100 - GENERAL CLASSROOM											
	Classroom			7,290			12,590	12,590	<i>new space assumed to be shared w/ other depts</i>	5,300	
	Other			491			491	491		0	
TOTAL 100 - GENERAL CLASSROOM		0		7,781	0		13,081	13,081		5,300	68.1%
200 - SPECIAL CLASSROOM											
	Teaching Labs			Existing ASF			WSCH calc	calc - WSCH growth			
	TL1 Computer Lab	1,243	0.629	782	1,434	1.181	1,693	2,176	2 new labs	1,394	178.3%
	TL1d Computer Lab	35	13.229	463	171	1.493	255	688	1 new lab	225	48.6%
	TL1L Computer Lab	320	0.000	0	697	1.108	772	1,276	1 new lab	1,276	
	(Data Base Existing)										
	SUBTOTAL TEACHING LABS	1,598		1,245	2,302		2,720	4,140		2,895	232.5%
	Other Lab Space										
	Lab Support, Research, Independent Study			0			0	0		0	
TOTAL 200 - SPECIAL CLASSROOM				1,245			2,720	4,140		2,895	232.5%
300 - OFFICE		WS	ASF/WS	ASF	WS	ASF/WS	ASF	ASF	COMMENT	ASF	PERCENT
	PO-1 Executive	2			2	337	674	674	Staff growth, new space		
	PO-2 Faculty/Professional	36			40	202	8,080	8,080			
	OS-1 Tech/Paraprofessional	0			1	162	162	162			
	OS-2 Clerical/Secretary/Grad SS	10			12	115	1,380	1,380			
	OS-3 Part-Time Student	3			4	50	200	200			
TOTAL 300 - OFFICE		51	103	5,230	59	178	10,496	10,496		5,266	100.7%
TOTAL 400-900 OTHER				729			1,529	1,529	ASF/WS: 178	800	109.7%
	400 Library, 500 Special, 600 General, 700 Support, 800 Health, 900 Residential										
TOTAL 000 - UNCLASSIFIED							0	0		0	
	Inactive/Alteration ASF										
DEPARTMENT TOTAL ASF		51		14,985	59		27,826	29,246	95.17%	14,261	95.17%



Needs

Course Analysis Table -
Mathematics

Existing Spring Semester, 1998							Projected Ultimate Phase			
Courses	Total Enrolled Students	# of Lab Sections per Course	Total Weekly Hours	Contact Hours per Week	TOTAL Contact Hours	Enrolled Students	Contact Hours per Week	TOTAL Contact Hours	Teaching Lab Type	
				Teaching Lab per Week	Total Teaching Lab		Teaching Lab per Week	Total Teaching Lab		
MAT 10990	22	1	3	3.0	66	30	3.0	90	1j	
MAT 14410	131	6	6	1.0	131	200	1.0	200	1	
MAT 21100	225	9	9	1.0	225	235	1.0	235	1	
MAT 21200	254	8	8	1.0	254	235	1.0	235	1	
MAT 21700	40	2	4	2.0	80	66	4.0	264	1j	
MAT 22500	73	2	2	1.0	73	90	1.0	90	1	
MAT 23450	8	1	1	1.0	8	20	1.0	20	1d	
MAT 24200	244	7	7	1.0	244	280	1.0	280	1	
MAT 24420	65	3	3	1.0	65	50	1.0	50	1	
MAT 24430	36	2	2	1.0	36	50	1.0	50	1	
MAT 25500	20	1	1	1.0	20	22	2.0	44	1	
MAT 26700	11	1	2	2.0	22	28	4.0	112	1j	
MAT 32710	12	1	1	1.0	12	25	1.0	25	1d	
MAT 32720	15	1	1	1.0	15	25	1.0	25	1d	
MAT 33200	18	1	3	3.0	54	22	3.0	66	1j	
MAT 35020	9	1	0	0.0	0	15	1.0	15	1d	
MAT 35200	127	5	5	1.0	127	180	1.0	180	1	
MAT 35700	7	1	0	0.0	0	25	1.0	25	1d	
MAT 36200	38	2	2	1.0	38	40	1.0	40	1	
MAT 48100	30	1	3	3.0	90	35	3.0	105	1j	
MAT 48500	2	1	0	0.0	0	15	1.0	15	1d	
MAT 49200	30	1	1	1.0	30	30	1.0	30	1	
MAT 49700	8	1	1	1.0	8	20	3.0	60	1j	
MAT 50350			0	0.0	0	10	3.0	30	1d	
MAT 50500	2	1	0	0.0	0	8	1.0	8	1d	
MAT 51000	3	1	0	0.0	0	8	1.0	8	1d	
Mathematics Total			65		1,598			2,302		

Enter projected enrollment for each course for the Fall 2013 semester.

Edit # of hours per week an individual student occupies teaching lab space (Contact Hours per Week) for each course listed in Existing (Fall Semester) 1998 and Projected (Fall Semester) 2013. Enter any new courses to be added between Fall 1998 and Fall 2013 into the Projected Course list.

Total Weekly Hours = # of Lab Sections per Course (per week) times the number of teaching lab contact hours per week.

Total Teaching Lab Contact Hours = Total Enrolled Students times the number of teaching lab contact hours per week.

Needs

Existing Teaching Lab Space Analysis - 1998 Math Teaching Labs

Academic Unit	Room Code	Room Type	Course	Bldg/	Room(s)	No. of Rooms	Existing ASF	Total Stations	ASF/ Station	Weekly Rm Hrs	Avg. Hrs/Wk Room Utiliz	% Occup. Stations	WSCH	ASF/ WSCH	Comment
1.05 Math															
	TL1	Computer Lab		Old M	304	1	782	22	36	46	46	122.8%	1243	0.629	
			MAT 14410							6			131		
			MAT 21100							9			225		
			MAT 21200							8			254		
			MAT 22500							2			73		
			MAT 24200							7			244		
			MAT 24420							3			65		
			MAT 24430							2			36		
			MAT 25500							1			20		
			MAT 35200							5			127		
			MAT 36200							2			38		
			MAT 49200							1			30		
	TL1d	Computer Lab		Old M	303b	1	463	15	31	3	3	77.8%	35	13.229	
			MAT 23450							1			8		
			MAT 32710							1			12		
			MAT 32720							1			15		
			MAT 35020							0			0		
			MAT 35700							0			0		
			MAT 48500							0			0		
			MAT 50350							0			0		
			MAT 50500							0			0		
			MAT 51000							0			0		
	TL1L	Computer Lab				0	0	0	#DIV/0!	16	#DIV/0!	#DIV/0!	320	0.000	no existing lab
			MAT 10990							3			66		
			MAT 21700							4			80		
			MAT 26700							2			22		
			MAT 33200							3			54		
			MAT 48100							3			90		
			MAT 49700							1			8		
Total Department							1,245	37		65			1598		

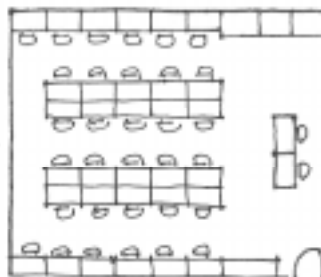
Campus Master Plan

Needs

TL I	Computer Lab	32ss/1088 asf
TL I D	Computer Lab	16ss/688asf
TL I L	Computer Lab	40ss/1276asf

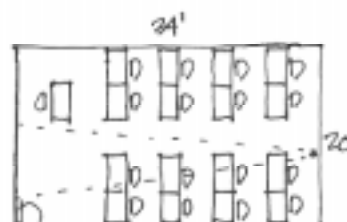
TL-I COMPUTER LAB

- 32ss @ 34sf/ss
= 1,088 asf
- 32 computer @ 2'x4'
 - 2 - 3x5 HELP/INSTR. DESK
 - 3 PRINTERS



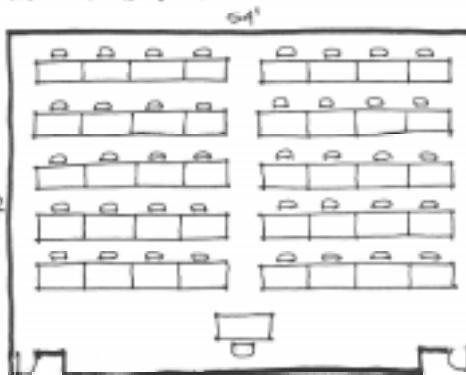
TL-ID COMPUTER LAB

- 16ss @ 43 asf/ss
= 688 asf
- 16 - 2'x4' COMPUTER TABLES
PROJECTOR



TL-IL COMPUTER LAB / DRAFTING LAB

- 40ss @ 34sf/ss
= 2,160 asf
- 40ss @ 2'x5' STATION
 - INSTRUCTOR'S DESK/STATION





Needs

Music Department



The Music Department currently has a total of 32,432 ASF, all in the Doudna Fine Arts Center. The total proposed space target for the Music Department is **51,679 ASF**, a growth of **59%**. The department is in serious need of teaching lab space – acoustical rooms, instrument/band rehearsal, piano and keyboard. It also has very little storage, and needs additional backstage space to make Dvorak Hall work effectively. In the Maximum Level calculation, the department would like a new 175-seat Performance Hall.



Because of the specialized design of its existing facilities, the Music Department is best served with expanded space in its existing Doudna Fine Arts Center location. Facility conflicts with the Theater Department need to be resolved, particularly in acoustical separation. Music practice rooms located beneath the Theater must be moved. Other spaces require acoustical treatment to damper sound transmission.

The key elements of the growth are in Special Classroom spaces including Computer Lab, Acoustic Labs (2), Acoustical Percussion Lab, Instrument Rehearsal Lab (100 stations), Band Rehearsal (200 stations), Electric Piano Lab and two new Keyboard Labs; a new 175-seat Performance Hall; expansion of the Dvorak Hall backstage area; and Office Support space.

The existing 575-seat Dvorak Hall has, in effect, the performance capability of a high school auditorium. It suffers from poor acoustics and will require a major renovation.

Because of the specialized design of its existing facilities, the Music Department is best served with expanded space in its existing location. Many of the department's existing spaces will remain in use, with appropriate renovations to solve acoustical and other quality-based shortcomings. Additional space will be provided through the expansion and internal reallocation of space in the Doudna Fine Arts Center.

Campus Master Plan

Needs

Course Analysis Table - Music

Existing Spring Semester, 1998							Projected Ultimate Phase			
Courses	Total Enrolled Students	# of Lab Sections per Course	Total Weekly Hours	Contact Hours per Week	TOTAL Contact Hours	Enrolled Students	Contact Hours per Week	TOTAL Contact Hours	Teaching Lab Type	
				Teaching Lab per Week	Total Teaching Lab		Teaching Lab per Week	Total Teaching Lab		
MUS 200	40	1	2	2.0	80	45	2.0	90	74a	
MUS 202	135	1	3	3.0	405	200	3.0	600	74b	
MUS 205	10	1	1	1.0	10	10	1.0	10	72	
MUS 210	9	1	3	3.0	27	20	3.0	60	72	
MUS 211	13	1	2	2.0	26	20	2.0	40	72	
MUS 215	5	1	1	1.0	5	10	1.0	10	72	
MUS 220	16	1	4	4.0	64	16	4.0	64	72a	
MUS 222	14	2	8	4.0	56	16	4.0	64	72	
MUS 224	7	1	1	1.0	7	15	1.0	15	72	
MUS 230	18	1	4	4.0	72	60	4.0	240	74a	
MUS 231	82	1	4	4.0	328	100	4.0	400	74b	
MUS 232	16	1	5	5.0	80	20	5.0	100	72a	
MUS 233	11	1	2	2.0	22	20	4.0	80	72	
MUS 240	7	1	4	4.0	28	20	4.0	80	74a	
MUS 241	10	1	4	4.0	40	20	4.0	80	74a	
MUS 242	14	1	4	4.0	56	16	4.0	64	74a	
MUS 260	1	1	4	4.0	4	5	1.0	5	72	
MUS 11030	93	1	2	2.0	186	110	2.0	220	76a	
MUS 11360	11	1	2	2.0	22	14	2.0	28	72	
MUS 12030	39	3	18	6.0	234	36	6.0	216	75a	
MUS 12040	10	2	8	4.0	40	24	4.0	96	75a	
MUS 13010	12	1	2	2.0	24	12	2.0	24	72	
MUS 13020	12	1	2	2.0	24	12	2.0	24	72	
MUS 13030	0	0	0	0.0	0	12	2.0	24	72	
MUS 13040	13	1	2	2.0	26	12	2.0	24	72a	
MUS 13050	12	1	2	2.0	24	12	2.0	24	72	
MUS 14210	120	4	48	12.0	1,440	96	12.0	1,152	79	
MUS 15300	5	1	2	2.0	10	8	2.0	16	72	
MUS 21410	12	1	2	2.0	24	12	2.0	24	72	
MUS 21550	14	1	2	2.0	28	15	2.0	30	72	
MUS 22030	12	2	4	2.0	24	12	2.0	24	75a	
MUS 22050	12	1	2	2.0	24	10	2.0	20	75a	
MUS 22100	16	1	3	3.0	48	16	3.0	48	72	
MUS 22210	5	1	3	3.0	15	8	3.0	24	75a	
MUS 23600	14	1	2	2.0	28	14	2.0	28	74	
MUS 24400	23	1	2	2.0	46	20	1.0	20	1h	
MUS 25570	575	2	12	6.0	3,450	600	6.0	3,600	77	
MUS 31200	11	1	3	4.0	44	15	4.0	60	77	
MUS 32210	3	1	2	2.0	6	8	2.0	16	75a	
MUS 34000	9	1	3	3.0	27	15	3.0	45	72	
MUS 34390	10	2	6	3.0	30	20	3.0	60	72a	
MUS 35300	35	1	3	3.0	105	40	3.0	120	72	
Music Total			193		7,239			7,969		

Total Weekly Hours = # of Lab Sections per Course (per week) times the number of teaching lab contact hours per week.

Total Teaching Lab Contact Hours = Total Enrolled Students times the number of teaching lab contact hours per week.

Campus Master Plan

Needs

Existing Teaching Lab Space Analysis - 1998 Music Teaching Labs

Academic Unit	Room	Room Type	Course	Bldg/	Room(s)	No. of	Existing	Total	ASF/	Weekly	Avg. Hrs/Wk	% Occup.	WSCH	ASF/	Comment
	Code					Rooms	ASF	Stations	Station	Rm Hrs	Room Utiliz	Stations	WSCH		
1.06 Music															
	TL1h	Computer Lab		FAM	230	1	338	12	28	2	2	191.7%	46	7.348	
			MUS 24400							2			46		
	TL72	Acoustic Lab							#DIV/0!	45	#DIV/0!	#DIV/0!	493	0.000	
			MUS 205							1			10		
			MUS 210							3			27		
			MUS 211							2			26		
			MUS 215							1			5		
			MUS 222							8			56		
			MUS 224							1			7		
			MUS 233							2			22		
			MUS 260							4			4		
			MUS 11360							2			22		
			MUS 13010							2			24		
			MUS 13020							2			24		
			MUS 13030							0			0		
			MUS 13050							2			24		
			MUS 15300							2			10		
			MUS 21410							2			24		
			MUS 21550							2			28		
			MUS 22100							3			48		
			MUS 34000							3			27		
			MUS 35300							3			105		
	TL72a	Acoustical Percussion Lab				0	0	0	#DIV/0!	17	#DIV/0!	#DIV/0!	200	0.000	no existing lab
			MUS 220							4			64		
			MUS 232							5			80		
			MUS 13040							2			26		
			MUS 34390							6			30		
	TL74	Instrument Rehearsal - 40ss				0	0	0	#DIV/0!	2	#DIV/0!	#DIV/0!	28	0.000	no existing lab
			MUS 23600							2			28		
	TL74a	Instrument Rehearsal - 100ss				0	0	0	#DIV/0!	18	#DIV/0!	#DIV/0!	276	0.000	no existing lab
			MUS 200							2			80		
			MUS 230							4			72		
			MUS 240							4			28		
			MUS 241							4			40		
			MUS 242							4			56		
	TL74b	Band Rehearsal - 200ss		FAM	112	1	1,977	75	26	7	7	139.6%	733	2.697	existing 75 ss space too small for 200ss band
			MUS 202							3			405		
			MUS 231							4			328		
	TL75a	Electronic Piano Lab		FAM	204	1	301	15	20	37	37	61.8%	343	0.878	
			MUS 12030							18			234		
			MUS 12040							8			40		
			MUS 22030							4			24		
			MUS 22050							2			24		
			MUS 22210							3			15		
			MUS 32210							2			6		
	TL76a	Performance Hall				0	0	0	#DIV/0!	2	#DIV/0!	#DIV/0!	186	0.000	uses Dvorak Hall
			MUS 11030							2			186		
	TL77	Recital Hall				0	0	0	#DIV/0!	15	#DIV/0!	#DIV/0!	3494	0.000	uses Dvorak Hall
			MUS 25570							12			3450		
			MUS 31200							3			44		
	TL79	Keyboard Lab		FAM	229	1	660	24	28	48	48	125.0%	1440	0.458	
			MUS 14210							48			1440		
Total Department							3,276	126		193			7239		



Needs

Projected Teaching Lab Space Need - Ultimate Phase
Music Teaching Labs

Academic Unit	Room	Room Type	Course	ASF/	Avg. Hrs/Wk	% Occup.	WSCH	ASF/	PROJ	Max Target	Comment
	Code			Station	Room Utiliz	Stations		WSCH	ASF	ASF	
1.06 Music											0
	TL1h	Computer Lab 24ss/1152asf	MUS 24400	48	36	80.00%	20	1.667	33	1,152	24 - 3'x4' ? computer tables, instructor 1 new lab: existing too small
	TL72	Acoustic Lab 20ss/400asf	MUS 205	20	36	80.00%	691	0.694	480	800	piano, 20 folding chairs (one w/ 2 pianos) 2 new labs: no existing lab
			MUS 210				10				
			MUS 211				60				
			MUS 215				40				
			MUS 222				10				
			MUS 224				64				
			MUS 224				15				
			MUS 233				80				
			MUS 260				5				
			MUS 11360				28				
			MUS 13010				24				
			MUS 13020				24				
			MUS 13030				24				
			MUS 13050				24				
			MUS 15300				16				
			MUS 21410				24				
			MUS 21550				30				
			MUS 22100				48				
			MUS 34000				45				
			MUS 35300				120				
	TL72a	Acoustical Percussion Lab 15ss/600asf	MUS 220	40	30	80.00%	248	1.667	413	600	piano, 15 folding chairs, extra performance space 1 new lab: no existing lab
			MUS 232				64				
			MUS 13040				100				
			MUS 34390				24				
							60				
	TL74	Instrument Rehearsal - 40ss 40ss/1800asf	MUS 23600	45	30	80.00%	28	1.875	53	0	tiered rehearsal hall for 40ss share TL74a, or 116 THA w/ Theater TL71b)
	TL74a	Instrument Rehearsal - 100ss 100ss/3200asf	MUS 200	32	30	80.00%	554	1.333	739	3,200	rehearsal hall for 100ss 1 new lab: no existing (could use exist. TL74b)
			MUS 230				90				
			MUS 240				240				
			MUS 241				80				
			MUS 242				80				
	TL74b	Band Rehearsal - 200ss 200ss/5200asf	MUS 202	26	11	90.00%	1000	2.626	2,626	5,200	Sim. To existing 75ss tiered band rehearsal lab, for 200 1 new lab: existing too small
			MUS 231				600				
							400				
	TL75a	Electronic Piano Lab 24ss/1230asf	MUS 12030	51	30	80.00%	396	2.135	846	1,230	24 stations @ 20 x 5'6" , instructor station 1 new lab: existing too small
			MUS 12040				216				
			MUS 22030				96				
			MUS 22050				24				
			MUS 22210				20				
			MUS 32210				24				
							16				
	TL76a	Performance Hall 100ss/1800asf	MUS 11030	18	22	80.00%	220	1.023	225	0	tiered, 100 chairs, 2 pianos, acoustical treatment 1 new space, in Cat. 600: no existing lab (share w/ Theater?)
	TL77	Recital Hall 400ss/6000asf	MUS 25570	15	11	80.00%	3660	1.705	6,239	0	400ss, stage - continue to use Dvorak? use Dvorak (coded Assembly)
			MUS 31200				3600				
							60				
	TL79	Keyboard Lab 24ss/992asf	MUS 14210	41	30	80.00%	1152	1.722	1,984	2,644	24 - 2'x4' keyboards, instructor, storage, sound system 1 existing, 2 new labs
							1152				
Total Department							7969		13,637	14,826	

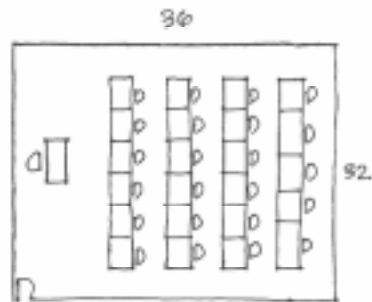
Campus Master Plan

Needs

TL 1 H	Computer Lab	24ss/1152 asf
TL 72	Acoustic Lab	20ss/400asf
TL 72 A	Acoustical Percussion Lab	15ss/600asf
TL 74	Instrument Rehearsal Lab	40ss/1800asf
TL 74 A	Instrument Rehearsal Lab	100ss/3200asf
TL 74 B	Band Rehearsal Lab	200ss/5200asf
TL 75 A	Electronic Piano Lab	24ss/1230asf
TL 76 A	Performance/ Lecture Hall	100ss/1800asf
TL 77	Recital Hall	400ss/6000asf
TL 79	Keyboard Lab	24ss/992asf

TL-1H COMPUTER LAB

24SS @ 32ASF/SS =
1152 ASF 1152
- 24 - 5'x4' Computer
Stations
- 3'x4' INSTRUCTOR
STATION



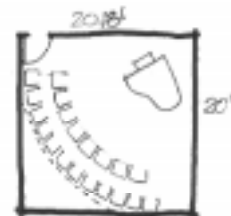
TEACHING LAB 72

ACOUSTICAL LAB - 20 SS
(MUSIC)

ASF/STATION - 20

20 STATIONS @ 20 ASF/SS = 400 ASF

- RANK 24 THEATER CHAIRS, FLAT FLOOR
- SOUND TREATMENT
- 12-14' HIGH CEILING





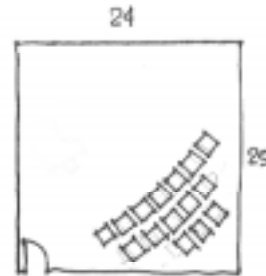
Needs

TL 72A

ACOUSTIC PERCUSSION LAB

15 SS @ 40 ASF/SS = 600 ASF

- 15 FOLDING CHAIRS
- PERFORMANCE SPACE

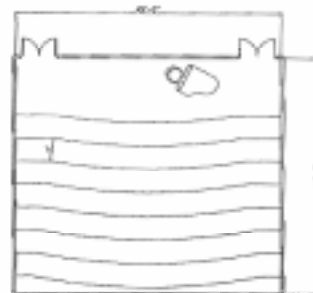


TL-74

INSTRUMENT REHEARSAL LAB

40 SS

1800 ASF
45 ASF/SS

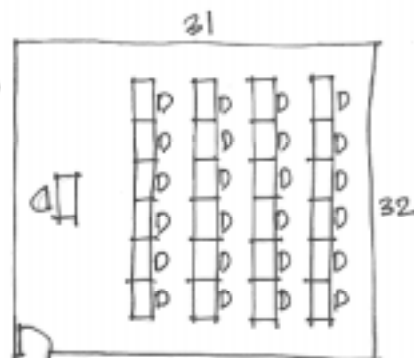


TL-79

KEYBOARD LAB

24 SS @ 2'x4' / SS
@ 41 ASF/SS = 992 ASF

- 24 - 2'x4' KEYBOARD
- 1 - INSTRUCTOR STA.



Campus Master Plan

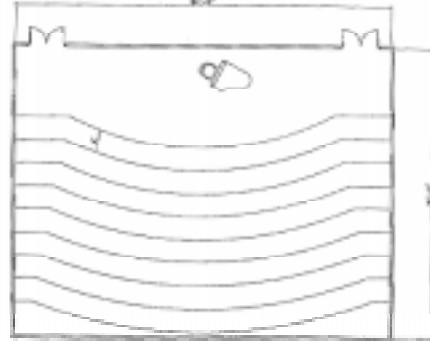
Needs

TL-74A

INSTRUMENT
REHEARSAL
LAB

100 SS

3200 ASF
32 ASF/SS

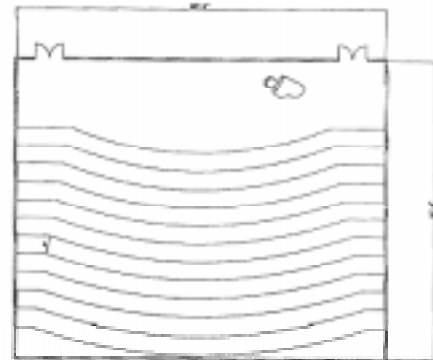


TL-74B

BAND
REHEARSAL
LAB

200 SS

5200 ASF
26 ASF/SS



TL-75A
ELECTRONIC
PIANO LAB

24SS @ 51 ASF/SS
= 1,230 ASF

84 - 2x5'6" KEYBOARD
1 - INSTRUCTOR SPA

