



# SPACE AND FURNITURE PLANNING GUIDELINES

Fall 2020

Campus Planning, Design and Construction

# New Jersey Institute of Technology

## Space and Furniture Planning Guidelines

### OVERVIEW

Introduction .....	4
--------------------	---

### 1. Offices

Office Standards .....	5
1.1 Office Types .....	5
1.2 Design Elements.....	5
• Furniture .....	5
• Finishes.....	5
• Finish Standards.....	6
• Carpets.....	7
• Lighting .....	8
• Whiteboards.....	9
• Standard Space Sizes and Finishes.....	9
1.3 Space Planning Guideline Summary – Table 1.....	10
1.4 Miscellaneous Items – fig.13 .....	24

### 2. Classrooms, Computer Clusters and Conference Rooms

Introduction.....	25
2.1 Classrooms and Classroom Space Guidelines Table 2.....	27
2.2 Design Elements for General Purpose Classrooms .....	28
2.3 Computer Clusters .....	35
2.4 Conference Rooms	
• Guidelines .....	39

### **3. Research and Laboratory Space**

Introduction.....	<b>43</b>
3.1 Planning Themes .....	<b>44</b>
3.2 Guidelines.....	<b>46</b>
3.3 Wet Laboratories.....	<b>47</b>
3.4 Dry Laboratories .....	<b>52</b>

### **4. Other Spaces**

Introduction.....	<b>54</b>
4.1 Office Service Space.....	<b>54</b>
4.2 Storage Space.....	<b>55</b>
4.3 Kitchen Space.....	<b>57</b>
4.4 Project Rooms.....	<b>57</b>
4.5 Media.....	<b>58</b>
4.6 Clinic.....	<b>58</b>
4.7 Demonstration.....	<b>58</b>
4.8 Student Lounge.....	<b>59</b>

### **5. Sources**

Citation.....	<b>59</b>
---------------	-----------

## **Introduction**

The purpose of this document is to provide the framework for planning the future space needs of the University. This document summarizes all of the guidelines, calculations and standards used through the process. The planning factors included are used as a part of a campus master plan and need to be detailed for a more specific day-to-day level of planning.

The following guidelines are a summary of parameters assembled from various sources. They have been adapted to respond to the specific needs of NJIT and its instructional methodology. The overall intent of the space guidelines is to establish a parameter for the amount of space needed to support the specified function.

The guidelines are a planning instrument to establish space adequacy on a uniform and equitable basis. They are reasonable estimates of the space needed, not a definitive “maximum” or “minimum”. In applying the guidelines to specific cases, consideration must be given to the room shape, equipment, access, utilization, and additional functional requirements. This becomes critical when applying the guidelines within the context of an existing facility. These guidelines are based on current planning standards and functions.

The Department of Campus Planning, Design, and Construction is a unit of REDCO Division and will be responsible for the maintenance of the standards and keeping all records. The standards will be reviewed periodically. The Department must approve any requests for variances.



# **1. Offices**

## **Space Standards**

Space standards were established to create uniformity and efficiency in the University's work environments. The standards encourage designers and other stakeholders to think in terms of adaptability for future reconfigurations. Inherently, the standards also discourage designs that dedicate space to infrequent or "luxury" uses.

### **1.1 Office Types**

The open office environment offers numerous advantages that are validated by industry research. Open environments promote creativity, collaboration, and flexibility, among other benefits. Closed offices will be allocated to employees by their directors. All other employees will be located in open offices.

### **1.2 Design Elements**

- **Furniture**

Modular furniture is the standard for all office space. Designers are to specify standard product lines and components for a look and quality that match throughout an organization. Stand-alone office furniture, or "case goods," will be evaluated by the Campus Planning, Design and Construction Department for specialty conditions only.

- **Finishes**

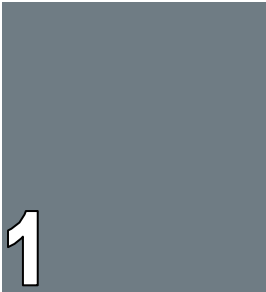
The selection of finish materials and colors for a public space (i.e., one visited by students, parents, community members, etc.) must be approved by the Campus Planning, Design and Construction Department." For non-public spaces, selections should remain within the University's approved color guidelines and furniture standards.

## Finish Standards

### Vinyl Cove Base

---

For the Vinyl cove base, mostly we use #1 and #2. for the tiles it all depends on the location.



Steel Blue P177



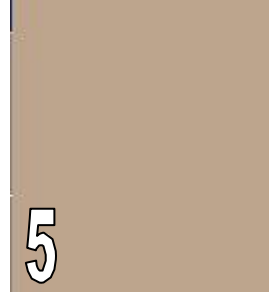
Black P100



Deep Navy P139



Blue P187

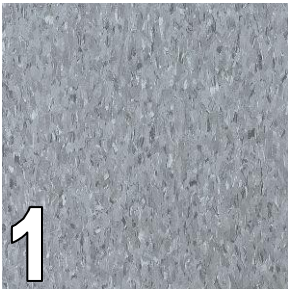


Camel P191

### VCT 12" TILE

---

Armstrong Imperial Texture Standard Excelon



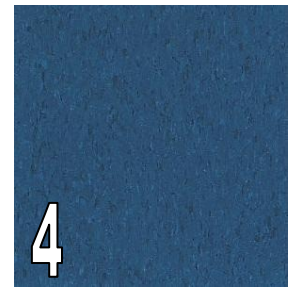
Blue/Gray 51903



Fortress White 51839



Buttercream Yellow 51800



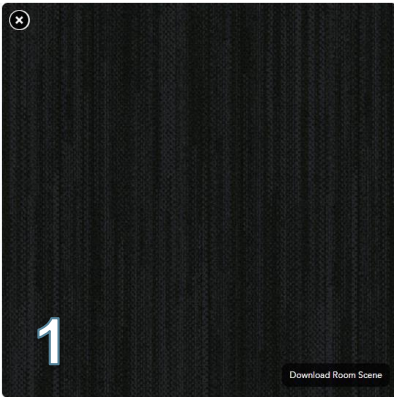
Gentian Blue 51946

### PAINT - Benjamin Moore

---

Facilities Services incorporated the usage of Benjamin Moore brand name paint for all our projects in the dorms. "Ultra Spec 500" is the reference product of choice as is more cost effective for our space renovations. Flat finish for drywall surfaces and Eggshell finish for cinder block walls. We may want to use the "Regal" or "Aura" type of paint as an alternative, but it depends on the project.

## Carpets



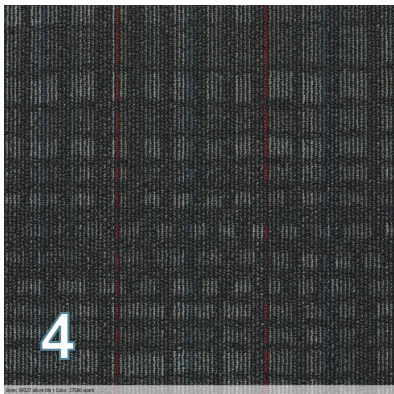
Manufacturer: Tandus-Artisan #03579  
Color: Argillite #43713  
Location: Fenster, GITC, CAB



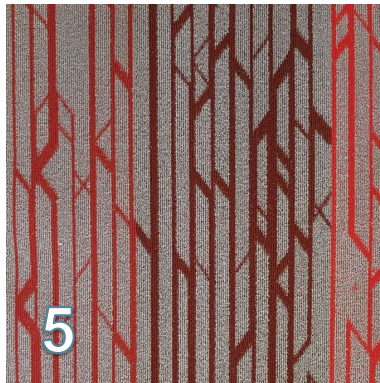
Manufacturer: Shaw -Central Line  
Color: Market Red #72506  
Location: Campus Center



Manufacturer: Mannington –Crosstalk  
Color: Video Decoder #14403  
Location: GITC 3rdFloor



Manufacturer: Shaw –Bright Work,  
Allure Tile #59327  
Color: Spark #27500  
Location: FMH



Manufacturer: Tandus–Linewave#04846  
Color: #1017527-005  
Location: WEC



Manufacturer: Tandus–Grid Overlay  
II #02969  
Color: Clean Coal #44030  
Location: CKB

- **Lighting and Dimmer Standards**

Please use the elements below for illustration purposes only. Please contact the department for the current model and approves fixtures for your project.



Manufacture: Cree  
Series: ZR  
Lamp Type: LED



Manufacture: Lithonia Lighting  
Series: FS  
Lamp Type: LED



Manufacture: Philips/Day-Bright  
Series: Arioso  
Lamp Type: CFL



Manufacture: Cree  
Series: Smartcast  
Color: White



Manufacture: Acuity  
Series: SPDMRD  
Color: White



Manufacture: Lutron  
Series: Diva  
Color: White

- **Whiteboard and Tack Board Standards**

For Illustration purposes only, please contact the Department for additional information.



Manufacture: Claridge  
Series: LCS Deluxe  
[With or without tack rail]  
Sizes: 3'x4', 4'x4', 4'x6',  
4'x8', 4'x10' and 4'x12'



Manufacture: Claridge  
Series: 800  
Colors: Contact designer  
Sizes: 3'x4', 4'x4', 4'x6',  
4'x8', 4'x10' and 4'x12'

- **Standard Space Sizes and Finishes**

The table on the following page shows the office type (open/closed), square footage allocated, and furniture/finish for each job category. Standard finishes are shown in the table 1 on the following page.



### 1.3 Space Planning Guideline Summary Table

Administration	Job Categories			Closed Office		Open Office		Notes
	Research/Academic	Athletic		Net Assignable Square Feet		Net Assignable Square Feet	Figure Number	
Executive V.P.	Provost	N/A		300-350		N/A	Fig. 1	
Associate V.P.	Vice Provost/Dean	Athletic Director		250-300		N/A	Fig. 2	
Assistant V.P.	Associate Provost/Associate Dean	N/A		200-250		N/A	Fig. 3	
N/A	Assistant to Dean	Associate Athletic Director		180-220		N/A	Fig. 4	
Administrative Director	Faculty Dept. Head/ Division Chair	N/A		125-150		N/A	Fig. 5	
N/A	N/A	Head Coach		125-150		N/A	Fig. 6	
N/A	Full Time Faculty	N/A		100-150		N/A	Fig. 7	
N/A	Full Time Faculty/ Emeritus	N/A		N/A		75 (Shared - 150)	Fig. 8	Shared Space Office
Professional/Associate Director/ Assistant Director	N/A	N/A		90-100		N/A	Fig. 9	
Staff	Part-time Faculty/Research Assistant/Teaching Assistant	N/A		N/A		65	Fig. 10	Cubicle Space
Staff	Part-time Faculty/Research Assistant/Teaching Assistant	N/A		N/A		75 (Shared - 150)	Fig. 11	Shared Space Office
N/A	Graduate Students	N/A		Varies		N/A	Fig. 12	4' Cubicle on Shared Space Office

#### Other drawings show

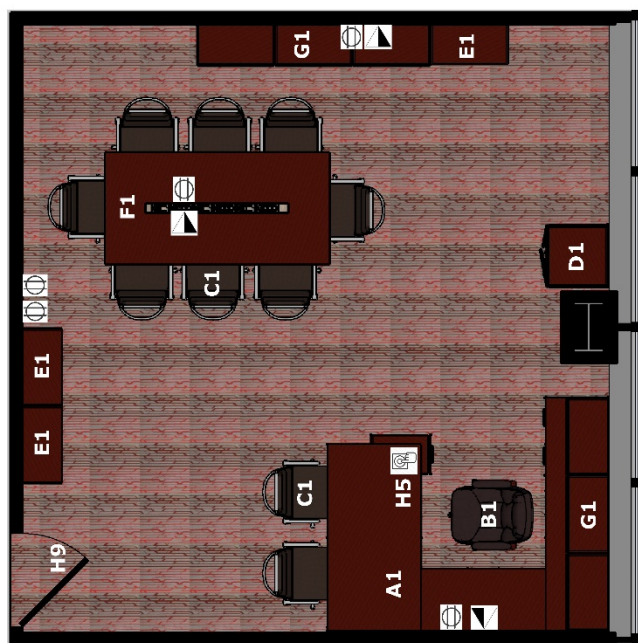
- Optional office furniture, including filing and storage pieces – Fig. 13
- Panel height options in an example 8' x 8' workstation. Panel heights can range from 42 to 64 inch depending on the workstation's function – fig. 10


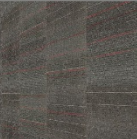
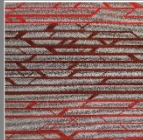
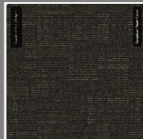
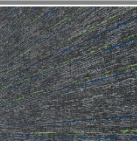
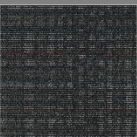
**Note:** Examples shown on the following pages are included as examples only and are not meant to prescribe final product or options. User needs are to be evaluated to determine actual layouts. The options depicted show how the same furniture can best be configured within the standard square footage.

- Director position requires direct reports with managerial responsibilities of those reports.
- Full-time faculty offices shall fall within the listed net assignable square footage (NASF) range depending on individual needs and potential physical constraints of existing structures.
- Part-time faculty offices shall fall within the listed NASF range depending on individual needs and potential physical constraints of existing structures. An option of shared closed office space within a 150-NASF closed office can be considered if the situation justifies.
- Emeritus faculty office space will be determined on a case-by-case basis in discussions among the department head, Campus Planning and Design, and any administrative space committee as necessary.
- Office sizes can only be changed or modified by the Sr. Vice president for Real Estate Development and Capital Operations.

Table 1

**Executive VP / Provost  
Closed Office**



FLOOR TYPE		CARPET TYPE STANDARDS	
WOOD	CARPET	<p>Manufacturer: Tandus Artisan #1037 Linewave Color: #017527-005 Location: Fenster, GITC, CAB</p> 	<p>Manufacturer: Shaw Central Line Color: Market Rea #17256 Location: Campus Center</p> 
TBD	EXPOSED CONC.	<p>Manufacturer: Tandus Linewave #04546 Color: #1017527-005 Location: WEC</p> 	<p>Manufacturer: Shaw Grid Overlay   #02559 Clean Coal #44030 Location: OKB</p> 
		<p>Manufacturer: Manning Crossstalk Color: Video Decoder #14403 Location: GITC 3rd Floor</p> 	<p>Manufacturer: Shaw Bright Work, Allure Tile #59327 Color: Spark #27150 Location: FMH</p> 

TYPE		COLOR		MATERIAL		D	HARDWARE	DATA		GENERAL NOTES	
FURNITURE ASSEMBLY	OVERHEAD CABINET										1. Ceiling heights are approximate 2. Wall texture: Semi-imperfect 3. All stained and exposed concrete shall be sealed
	BOOKCASE										
	OFFICE EQUIPMENT										
	SUPPLY MATERIALS										
	MAIN CHAIR										
	SIDE CHAIR										
	CONFERRING TABLE										
	SIDE TABLE										
	OPTIONAL ITEM										
	TBD										
AMBER CHERRY											
GREY STORM											
WOOD LIGHT											
TBD											
LAMINATED WOOD											
WOOD PANELING											
TBD											
EXPOSED CONC											
COMBO LOCK											
EVEREST 29											
SCHLAGE											
CARD READER											
DATA/TELEPHONE											
DUPLEX OUTLET											
QUAD OUTLET											
PANIC DEVICE											

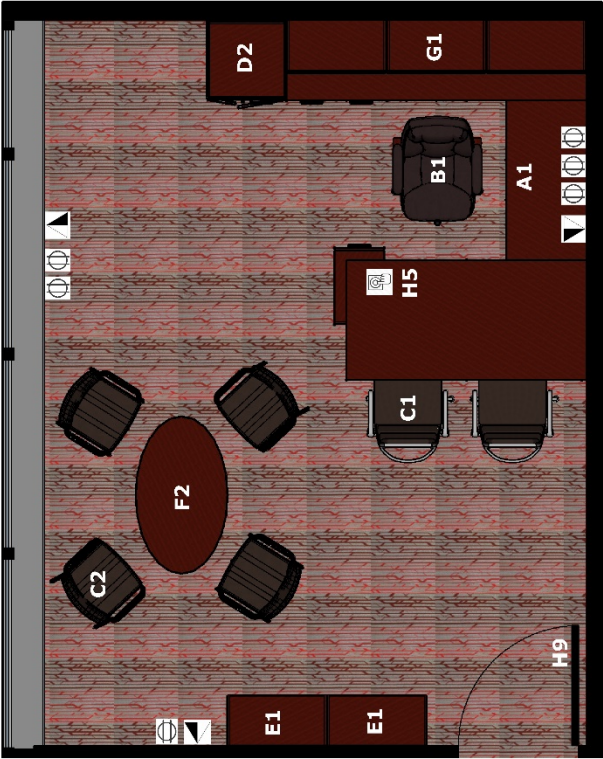
Note: All objects are for illustrative purposes Only

**Fig. 1**

## Office Options & Finish Schedule

Area	300-350 sq. ft. Approximated
Item	Description
A1	Level 1 Desk
B1	Main Chair - High Back Chair
D1	File Cabinet
E1	Wood Floor Bookcase
F1	Side Chair
H4	Chair Mat
F2	Side Table
F1	Confencing Table
G1	Overhead Storage
H10	Optional Items
H9	Lock-Set
H5	Panic Device

Associate V.P/ Vice Provost /Dean/  
Athletic Director - Closed Office



FLOOR TYPE			
WOOD			
CARPET			
EXPOSED CONC.			

CARPET TYPE STANDARDS			
Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTC, CAB	Manufacturer: Shaw Color: Market Beige #17216 Location: Campus Center	Manufacturer: Shaw Color: Market Beige #17216 Location: GTC 3rd Floor	Manufacturer: Shaw Color: Market Beige #17216 Location: RMR
Manufacturer: Tandus Linenweave #04946 Color: #1017527-005 Location: WEC	Manufacturer: Tandus Grid Overlay II #02559 Color: Clean Coal #44030 Location: CKB	Manufacturer: Tandus Grid Overlay II #02559 Color: Clean Coal #44030 Location: CKB	Manufacturer: Tandus Grid Overlay II #02559 Color: Clean Coal #44030 Location: CKB

Office Options &  
Finish Schedule

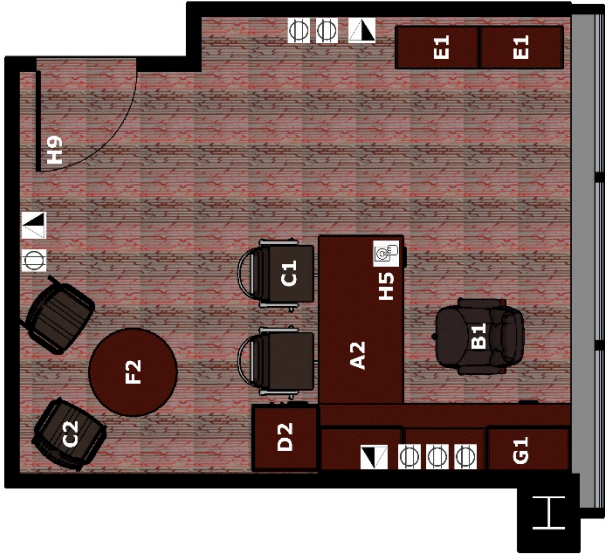
Area: 260-300 sq. ft. Approximated	
Item.	Description
A1	Level 1 Desk
B1	Main Chair - High Back Chair
D2	File Cabinet
E1	Wood Floor Bookcase
C1	Side Chair
C2	Side Chair
F2	Side Table
F1	Conferring Table
G1	Overhead Storage
H10	Optional Items
H9	LockSet
H5	Panic Device

TYPE	COLOR	MATERIAL	D. HARDWARE	DATA	GENERAL NOTES	
FURNITURE ASSEMBLY					1. Ceiling heights are approximate	
OVERHEAD CABINET					2. Wall texture: Semi-imperfect	
BOOKCASE					3. All stained and exposed concrete shall be sealed	
OFFICE EQUIPMENT						
SUPPLY MATERIALS						
MAIN CHAIR						
SIDE CHAIR						
CONFERRING TABLE						
SIDE TABLE						
OPTIONAL ITEM						
TBD						
AMBER CHERRY						
GREY STORM						
WOOD LIGHT						
TBD						
LAMINATED WOOD						
WOOD PANELING						
TBD						
EXPOSED CONC						
COMBO LOCK						
EVEREST 29						
SCHLAGE						
CARD READER						
DATA/TELEPHONE						
DUPLEX OUTLET						
QUAD OUTLET						
PANIC DEVICE						
				Note: All objects are for illustrative purposes Only		

Fig. 2



Assistant V.P/ Associate Provost /  
Associate Dean - Closed Office



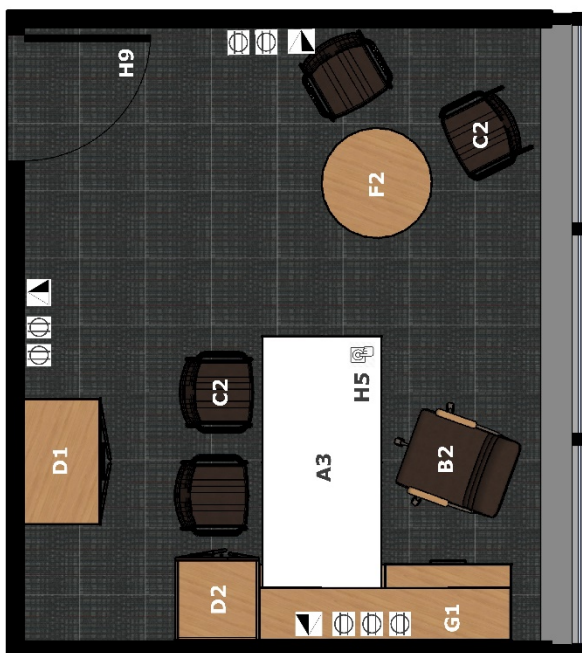
CARPET TYPE STANDARDS			
Manufacturer: Tandus Artisan #43713 Color: Red Location: Fenster, GTC, CAB	Manufacturer: Shaw Central Line Color: Market Reel #72506 Location: Campus Center	Manufacturer: Shaw Bright Work, Allure Tile #59327 Color: Stark #27500 Location: FHM	
Manufacturer: Tandus Artisan #43713 Color: Red Location: Fenster, GTC, CAB	Manufacturer: Tandus Artisan #43713 Color: Red Location: Fenster, GTC, CAB	Manufacturer: Tandus Artisan #43713 Color: Red Location: Fenster, GTC, CAB	
Manufacturer: Tandus Artisan #43713 Color: Red Location: Fenster, GTC, CAB	Manufacturer: Tandus Artisan #43713 Color: Red Location: Fenster, GTC, CAB	Manufacturer: Tandus Artisan #43713 Color: Red Location: Fenster, GTC, CAB	

Office Options & Finish Schedule	
Area: 200 - 250 sq.ft Approximated	
Item	Description
A2	Level 2 Desk
B1	Main Chair - High Back Chair
D2	File Cabinet
E1	Wood Floor Bookcase
C1	Side Chair
C2	Side Chair
F2	Side Table
F1	Confencing Table
G1	Overhead Storage
H10	Optional Items
H9	LockSet
H5	Panic Device

TYPE	COLOR	MATERIAL	D. HARDWARE	DATA	GENERAL NOTES	
FURNITURE ASSEMBLY					1. Ceiling heights are approximate	
OVERHEAD CABINET					2. Wall texture: Semi-imperfect	
BOOKCASE					3. All stained and exposed concrete shall be sealed	
OFFICE EQUIPMENT					Note:	
SUPPLY MATERIALS					All objects are for illustrative purposes Only	
MAIN CHAIR						
SIDE CHAIR						
CONFERRING TABLE						
SIDE TABLE						
OPTIONAL ITEM						
TBD						
AMBER CHERRY						
GREY STORM						
WOOD LIGHT						
TBD						
WOOD PANELING						
LAMINATED WOOD						
WOOD CONC.						
COMBO LOCK						
EVEREST 29						
SCHLAGE						
CARD READER						
DATA/TELEPHONE						
DUPLEX OUTLET						
QUAD OUTLET						
PANIC DEVICE						

Fig. 3

**Assistant to Dean/  
Associate Athletic Director  
Closed Office**



CARPET TYPE STANDARDS	
<p>Manufacturer: Tandus Artisan #02576 Color: Location: Fenster, GTC, CAB</p>	<p>Manufacturer: Shaw Central Line Color: Market Red #7256 Location: Campus Center</p>
<p>Manufacturer: Tandus Linewave #04546 Color: #107527-005 Location: WEC</p>	<p>Manufacturer: Tandus Grid Overlay   #02559 Color: Clean Coal #44030 Location: CKB</p>
<p>Manufacturer: Shaw Bright Work, Allure Tile #53327 Color: Spark #27590 Location: FMH</p>	<p>Manufacturer: Crosstalk Color: Video Decoder #14403 Location: GTC 3rd Floor</p>
<p>WOOD CARPET TBD EXPOSED CONC.</p>	

## Office Options & Finish Schedule

**Area. 180 - 220 sq.ft Approximated**

Item.	Description
-------	-------------

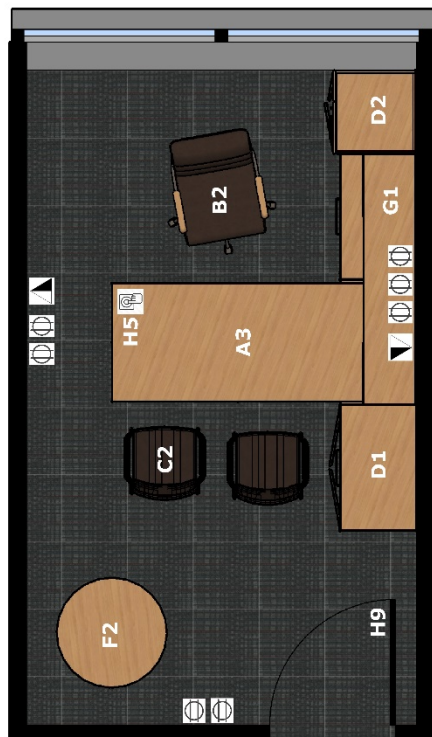
D3	Level 3 Desk
B2	Main Chair - Mid Back Chair
D1	File Cabinet
D2	File Cabinet
C2	Side Chair
F2	Side Table
G1	Overhead Storage
H10	Optional Items
H9	Lock/Seal
H5	Panic Device


TYPE	COLOR	MATERIAL	D HARDWARE	DATA	GENERAL NOTES
FURNITURE ASSEMBLY	TBD	LAMINATED WOOD	COMBO LOCK	DATA/TELEPHONE	1. Ceiling heights are approximate 2. Wall texture: Semi-imperfect 3. All stained and exposed concrete shall be sealed
OVERHEAD CABINET	TBD	TBD	EXPOSED CONC.	PANIC DEVICE	
BOOKCASE	TBD	TBD	TBD	SCHLAGE	
OFFICE EQUIPMENT	TBD	TBD	EVEREST 29	CARD READER	
SUPPLY MATERIALS	TBD	TBD	TBD	QUAD OUTLET	
MAIN CHAIR	TBD	TBD	TBD	DUPLEX OUTLET	
SIDE CHAIR	TBD	TBD	TBD	DATA/TELEPHONE	
CONFERRING TABLE	TBD	TBD	TBD		
SIDE TABLE	TBD	TBD	TBD		
OPTIONAL ITEM	TBD	TBD	TBD		
TBD	TBD	TBD	TBD		
AMBER CHERRY	TBD	TBD	TBD		
GREY STORM	TBD	TBD	TBD		
WOOD LIGHT	TBD	TBD	TBD		



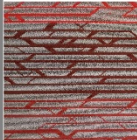

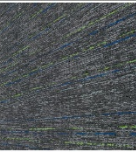
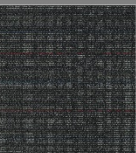
A 20x20 grid with red squares at (0,0), (1,1), (2,2), (3,3), (4,4), (5,5), (6,6), (7,7), (8,8), (9,9), (10,10), (11,11), (12,12), (13,13), (14,14), (15,15), (16,16), (17,17), (18,18), (19,19).

**Fig. 4**

**Administrative Director/  
Faculty Dept. Head/ Division Chair  
Closed Office**



FLOOR TYPE	WOOD	
	CARPET	
	TBD	
	EXPOSED CONC.	

CARPET TYPE STANDARDS	
<p>Manufacturer: Tandus Color: <b>Graphite</b> #43713 Location: Fenster, GITC, CAB</p> 	<p>Manufacturer: Shaw Central Line Color: Market Ref #72366 Location: Campus Center</p> 
<p>Manufacturer: Tandus Linewave <b>#D446</b> Color: #10107527-005 Location: WEC</p> 	<p>Manufacturer: Tandus Grid Overlay II #92659 Color: Clean Coal #44030 Location: CKS</p> 
<p>Manufacturer: Crosstalk Color: Video Decoder #14403 Location: GTC 3rd Floor</p> 	<p>Manufacturer: Shaw Bright Work, Allure Tile #5327 Color: Spark #27150 Location: PMH</p> 

## Office Options & Finish Schedule

Area. 125 - 150 sq.ft Approximated

Item.	Description
-------	-------------

A3	Level 3 Desk
B2	Main Chair - Mid Back Chair
D1	File Cabinet
D2	File Cabinet
C2	Side Chair
	Side Table
G1	Overhead Storage
	Optional Items
H9	LockSet
H5	Panic Device

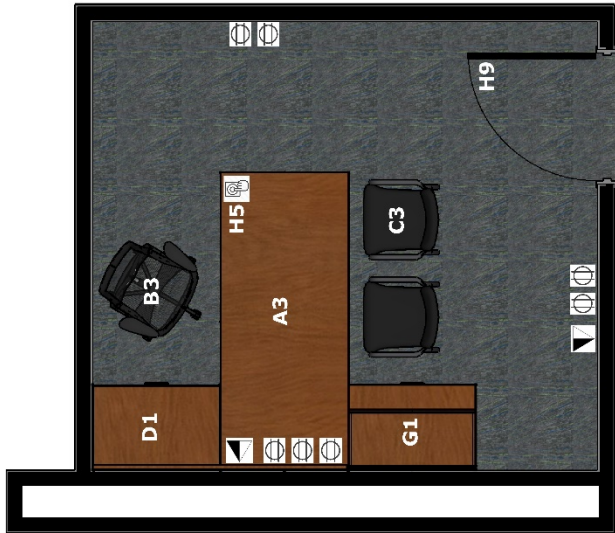
TYPE	COLOR	MATERIAL	D	HARDWARE	DATA	GENERAL NOTES
FURNITURE ASSEMBLY						
OVERHEAD CABINET						
BOOKCASE						
OFFICE EQUIPMENT						
SUPPLY MATERIALS						
MAIN CHAIR						
SIDE CHAIR						
CONFERRING TABLE						
SIDE TABLE						
OPTIONAL ITEM						
TD						
AMBER CHERRY						
GREY STORM						
WOOD LIGHT						
TD						
LAMINATED WOOD						
WOOD PANELING						
TD						
EXPOSED CONC.						
COMBO LOCK						
EVEREST 29						
SCHLAGE						
CARD READER						
DATA/TELEPHONE						
DUPLEX OUTLET						
SQUAD OUTLET						
PANIC DEVICE						

Note:  
All objects are for illustrative purposes Only

**Fig. 5**



Head Coach - Closed Office



FLOOR TYPE				CARPET TYPE STANDARDS			
WOOD	CARPET	TBD	EXPOSED CONC.				

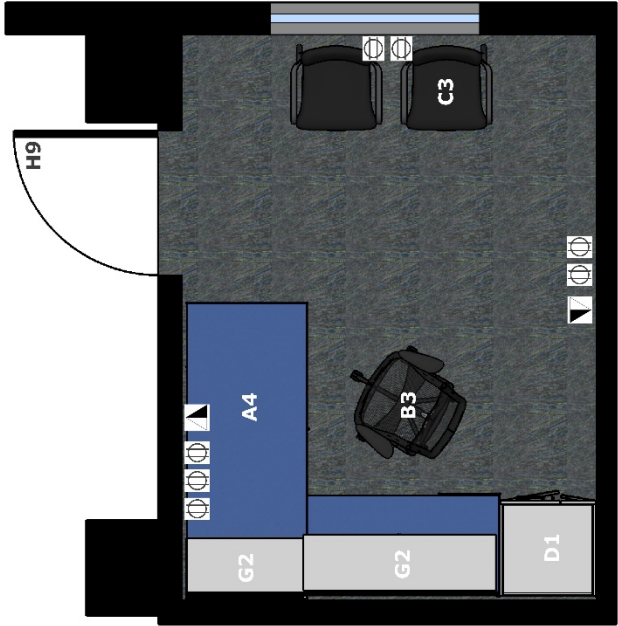
Office Options &  
Finish Schedule

Area	125 - 150 sq.ft. Approximated
Item	Description
A3	Level 3 Desk
B3	Main Chair - Executive Chair
D1	File Cabinet
C3	Side Chair
F2	Side Table
G1	Overhead Storage
H10	Optional Items
H9	LockSet
H5	Panic Device

TYPE	COLOR	MATERIAL	D. HARDWARE	DATA	GENERAL NOTES
FURNITURE ASSEMBLY					
OVERHEAD CABINET					
BOOKCASE					
OFFICE EQUIPMENT					
SUPPLY MATERIALS					
MAIN CHAIR					
SIDE CHAIR					
CONFERRING TABLE					
SIDE TABLE					
OPTIONAL ITEM					
TBD					
AMBER CHERRY					
GREY STORM					
WOOD LIGHT					
TBD					
LAMINATED WOOD					
WOOD PANELING					
TBD					
EXPOSED CONC.					
COMBO LOCK					
EVEREST 29					
SCHLAGE					
CARD READER					
DATA/TELEPHONE					
DUPLEX OUTLET					
QUAD OUTLET					
PANIC DEVICE					
Note: All objects are for illustrative purposes Only					

Fig. 6

Full Time Faculty - Closed Office



FLOOR TYPE			
WOOD			
CARPET			
TBD			
EXPOSED CONC.			

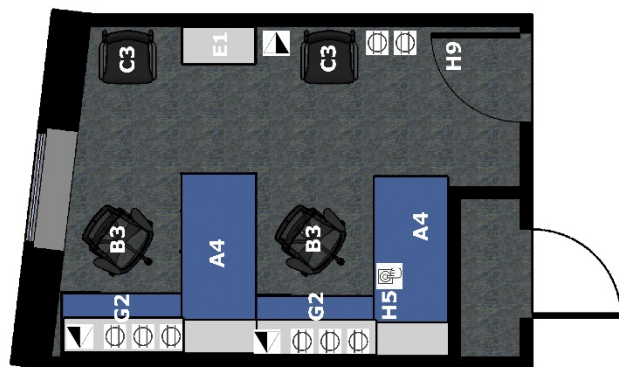
CARPET TYPE STANDARDS			
Manufacturer: Tardus Artline #103579 Color: Argillite #43713 Location: Fenster, GTC, CAB	Manufacturer: Shaw Central Line Color: Market Woods Location: GTC 3rd Floor Campus Center	Manufacturer: Shaw Bright Work, Allure Tile Color: Bright Work Location: FMT	
Manufacturer: Tardus Linewave #14846 Color: #1017327-005 Location: WEC	Manufacturer: Tardus Grid Overlay #22959 Color: Clean Coat #44030 Location: CKG		

Office Options &  
Finish Schedule

Area:	100 - 150 sq.ft Approximated
Item:	Description
A4	Level 4 Desk
B3	Main Chair - Executive Chair
D1	File Cabinet
C3	Side Chair
F2	Side Table
G2	Overhead Storage
H10	Optional Items
H9	LockSet
H5	Panic Device

TYPE	COLOR	MATERIAL	D. HARDWARE	DATA	GENERAL NOTES	
FURNITURE ASSEMBLY					1. Ceiling heights are approximate	
OVERHEAD CABINET					2. Wall texture: Semi-imperfect	
BOOKCASE					3. All stained and exposed concrete shall be sealed	
OFFICE EQUIPMENT					Note:	All objects are for illustrative purposes Only
SUPPLY MATERIALS						
MAIN CHAIR						
SIDE CHAIR						
CONFERRING TABLE						
SIDE TABLE						
OPTIONAL ITEM						
TBD						
AMBER CHERRY						
GREY STORM						
WOOD LIGHT						
TBD						
LAMINATED WOOD						
WOOD PANELING						
TBD						
EXPOSED CONC.						
COMBO LOCK						
EVEREST 29						
SCHLAGE						
CARD READER						
DATA/TELEPHONE						
DUPLEX OUTLET						
QUAD OUTLET						
PANIC DEVICE						

Fig. 7



FLOOR TYPE		CARPET TYPE STANDARDS	
WOOD	CARPET	<p>Manufacturer: Shaw Central Line Color: Market Rex #72506 Location: Campus Center</p>	<p>Manufacturer: Shaw Bright Work, Allure Tile #9327 Color: Spark #27500 Location: PMH</p>
	TBD	<p>Manufacturer: Tandus Applite #43713 Location: Fenster: GTC, CAB</p>	<p>Manufacturer: Tandus Grid Overlay II #92559 Color: Clean Coal #44030 Location: CAB</p>
EXPOSED CONC.		<p>Manufacturer: Tandus Linewave #B4446 Color: #107527-005 Location: WEC</p>	<p>Manufacturer: Manning Crossstalk Color: Video Decoder #14403 Location: GTC 3rd Floor</p>

## Office Options & Finish Schedule

Area. 75 (shared- 150 sq ft) Aproximated

Item.	Description
-------	-------------

A4	Level 4 Desk
B3	Main Chair - Executive Chair
D1	File Cabinet
C3	Side Chair
E1	Bookcase
G2	Overhead Storage
H10	Optional Items
H9	LockSet
H5	Panic Device

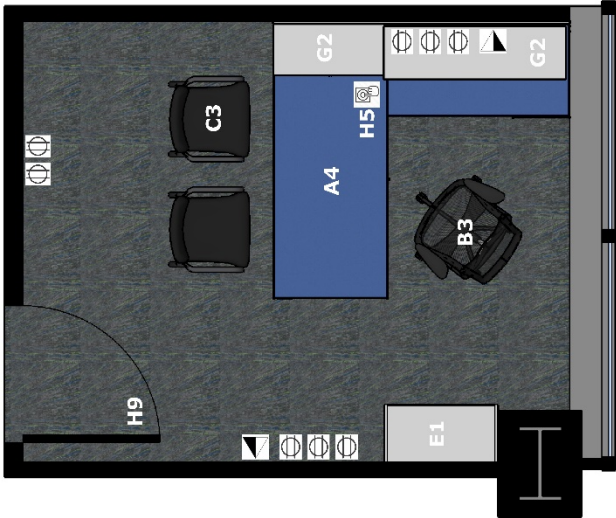
TYPE		COLOR	MATERIAL	D. HARDWARE	DATA	GENERAL NOTES
FURNITURE ASSEMBLY						1. Ceiling heights are approximate 2. Wall texture: Semi-Imperfect 3. All stained and exposed concrete shall be sealed
OVERHEAD CABINET						
BOOKCASE						
OFFICE EQUIPMENT						
SUPPLY MATERIALS						
MAIN CHAIR						
SIDE CHAIR						
CONFERRING TABLE						
SIDE TABLE						
OPTIONAL ITEM						
TTBD						
AMBER CHERRY						Note: All objects are for illustrative purposes Only
GREY STORM						
WOOD LIGHT						
TTBD						
LAMINATED WOOD						
WOOD PANELING						
TTBD						
EXPOSED CONC.						
COMBO LOCK						
EVEREST 29						
SCHLAGE						
CARD READER						
DATA/TELEPHONE						
DUPLEX OUTLET						
QUAD OUTLET						
PANIC DEVICE						

[illegible]



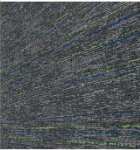

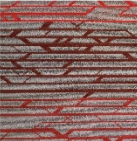


Fig. 8



Professional/Associate Director/  
Assistant Director - Closed Office



FLOOR TYPE
WOOD
CARPET
TBD
EXPOSED CONC.

CARPET TYPE STANDARDS		
<p>Manufacturer: Tandus Artisan #03579 Color: Argillite #43113 Location: Fanster, GTC, CAB</p>	<p>Manufacturer: Shaw Central Line Color: Market Red #72506 Location: Campus Center</p>	<p>Manufacturer: Shaw Bright Work, Allure Tile #59327 Color: Spark #27500 Location: FMH</p>
		
<p>Manufacturer: Tandus Lineaxe #04946 Color: Argillite #43113 Location: WEC</p>	<p>Manufacturer: Tandus Grid Overlay II #02609 Color: Black #000000 Location: CKB</p>	
		

Office Options &  
Finish Schedule

Area: 75 (shared- 150 sq ft) Approximated	Item.	Description
	A4	Level 4 Desk
	B3	Main Chair - Executive Chair
	D1	File Cabinet
	C3	Side Chair
	E1	Bookcase
	G2	Overhead Storage
	H10	Optional Items
	H9	LockSet
	H5	Panic Device

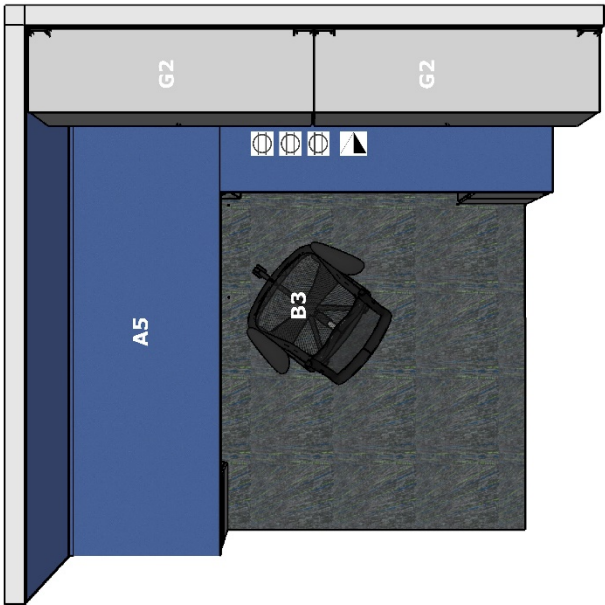
TYPE	COLOR	MATERIAL	D. HARDWARE	DATA	GENERAL NOTES
FURNITURE ASSEMBLY					1. Ceiling heights are approximate 2. Wall texture: Semi-imperfect 3. All stained and exposed concrete shall be sealed
OVERHEAD CABINET					
BOOKCASE					
OFFICE EQUIPMENT					
SUPPLY MATERIALS					
MAIN CHAIR					
SIDE CHAIR					
CONFERRING TABLE					
SIDE TABLE					
OPTIONAL ITEM					
TBD					
AMBER CHERRY					
GREY STORM					
WOOD LIGHT					
TBD					
LAMINATED WOOD					
WOOD PANELING					
TBD					
EXPOSED CONC.					
COMBO LOCK					
EVEREST 29					
SCHLAGE					
CARD READER					
DATA/TELEPHONE					
DUPLEX OUTLET					
QUAD OUTLET					
PANIC DEVICE					
Note: All objects are for illustrative purposes Only					

Fig. 9





Staff/ Part-time faculty/Research Asst.  
Teaching Asst.- Cubicle Option 2



FLOOR TYPE			
WOOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CARPET	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TBD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EXPOSED CONC.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CARPET TYPE STANDARDS			

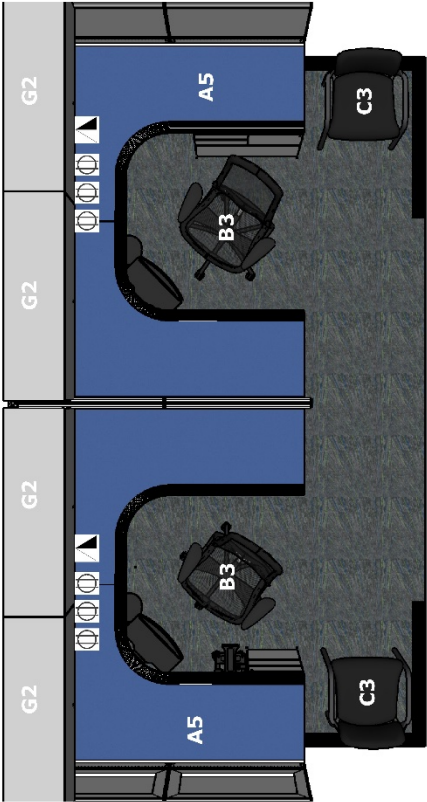
Office Options &  
Finish Schedule

Area:	65 sq ft Aproximated
Item:	Description
A5	Level 5 Cubicle Desk
B3	Main Chair - Executive Chair
C3	Side Chair
G2	Overhead Storage
H10	Optional Items
H9	LockSet
H5	Panic Device

TYPE	COLOR	MATERIAL	D. HARDWARE	DATA	GENERAL NOTES	
FURNITURE ASSEMBLY					1. Ceiling heights are approximate	
OVERHEAD CABINET					2. Wall texture: Semi-Imperfect	
BOOKCASE					3. All stained and exposed concrete shall be sealed	
OFFICE EQUIPMENT					Note:	All objects are for illustrative purposes Only
SUPPLY MATERIALS						
MAIN CHAIR						
SIDE CHAIR						
CONFERRING TABLE						
SIDE TABLE						
OPTIONAL ITEM						
TBD						
AMBER CHERRY						
GREY STORM						
WOOD LIGHT						
TBD						
LAMINATED WOOD						
WOOD PANELING						
TBD						
EXPOSED CONC.						
COMBO LOCK						
EVEREST 29						
CABINET LOCK						
CARD READER						
DATA/TELEPHONE						
DUPLEX OUTLET						
QUAD OUTLET						
PANIC DEVICE						

Fig.10A

Staff/ Part-time faculty/Research Asst.  
Teaching Asst.- Shared Space Cubicle



FLOOR TYPE
WOOD
CARPET
TBD
EXPOSED CONC.

CARPET TYPE STANDARDS			
Manufacturer: Tandus Artisan #03579 Color: Location: Fanster, GTC, C-6	Manufacturer: Shaw Cambridge Color: Market Location: J250 Campus Center	Manufacturer: Shaw Cambridge Color: Market Location: GTC 3rd Floor	Manufacturer: Shaw Cambridge Color: Market Location: GTC 3rd Floor
Manufacturer: Tandus Artisan #03579 Color: Location: Fanster, GTC, C-6	Manufacturer: Shaw Cambridge Color: Market Location: J250 Campus Center	Manufacturer: Shaw Cambridge Color: Market Location: GTC 3rd Floor	Manufacturer: Shaw Cambridge Color: Market Location: GTC 3rd Floor
Manufacturer: Tandus Artisan #03579 Color: Location: Fanster, GTC, C-6	Manufacturer: Shaw Cambridge Color: Market Location: J250 Campus Center	Manufacturer: Shaw Cambridge Color: Market Location: GTC 3rd Floor	Manufacturer: Shaw Cambridge Color: Market Location: GTC 3rd Floor

Office Options &  
Finish Schedule

Area: 75 (shared- 150 sq ft) Aproximated	
Item	Description
A5	Level 5 Cubicle Desk
B3	Main Chair - Executive Chair
C3	Side Chair
G2	Overhead Storage
H10	Optional Items
H9	LockSet
H5	Panic Device

TYPE	COLOR	MATERIAL	D. HARDWARE	DATA	GENERAL NOTES	
FURNITURE ASSEMBLY					1. Ceiling heights are approximate	
OVERHEAD CABINET					2. Wall texture: Semi-imperfect	
BOOKCASE					3. All stained and exposed concrete shall be sealed	
OFFICE EQUIPMENT					Note:	
SUPPLY MATERIALS					All objects are for illustrative purposes Only	
MAIN CHAIR						
SIDE CHAIR						
CONFERRING TABLE						
SIDE TABLE						
OPTIONAL ITEM						
TBD						
AMBER CHERRY						
GREY STORM						
WOOD LIGHT						
TBD						
LAMINATED WOOD						
WOOD PANELING						
TBD						
EXPOSED CONC.						
COMBO LOCK						
EVEREST 29						
CABINET LOCK						
CARD READER						
DATA/TELEPHONE						
DUPLEX OUTLET						
QUAD OUTLET						
PANIC DEVICE						

A5	Level 5 Cubicle Desk
B3	Main Chair - Executive Chair
C3	Side Chair
G2	Overhead Storage
H10	Optional Items
H9	LockSet
H5	Panic Device

Fig. 11





## 1.4 Miscellaneous Items

### Furniture, Storage & Miscellaneous Items Options

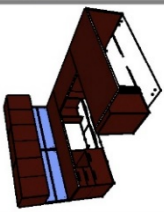
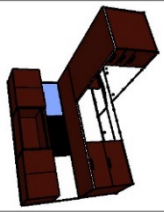
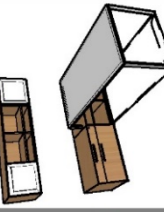
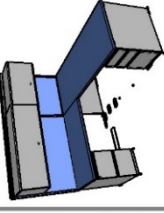
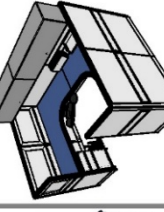
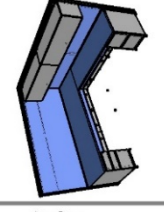



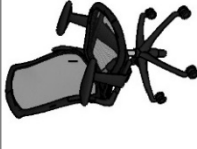

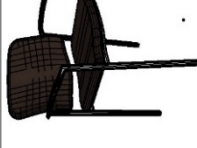

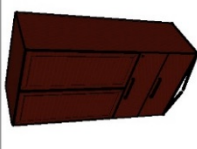
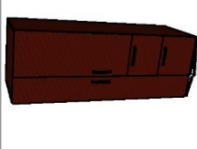
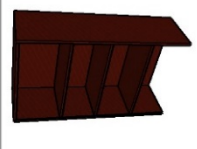

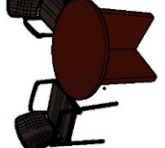
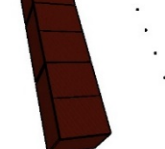
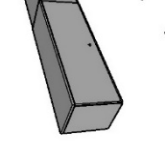











Desk Assembly	A1	Product Name: Level 1 assembly Manufacturer: TBD Model Number: TBD Location: FENS, GTC, CTR	
	A2	Product Name: Level 2 assembly Manufacturer: TBD Model Number: TBD Location: CUM, FENS, GTC, COLT	
	A3	Product Name: Level 3 assembly Manufacturer: TBD Model Number: TBD Location: MEC, CUM, COLT, CAMP	
	A4	Product Name: Level 4 assembly Manufacturer: TBD Model Number: TBD Location: Campus wide	
	A5	Product Name: Level 1 assembly Manufacturer: TBD Model Number: TBD Location: FENS, GTC, CTR	
	A6	Product Name: Level 5 assembly Manufacturer: TBD Model Number: TBD Location: FENS, GTC, CTR	
	A7	Product Name: Level 7 assembly Manufacturer: TBD Model Number: TBD Location: FENS, GTC, CTR	
Office Chair	B1	Product Name: Main chair - High Back Manufacturer: TBD Model Number: TBD Location: Campus wide	
	B2	Product Name: Main chair - Mid Back Manufacturer: TBD Model Number: TBD Location: Campus wide	
	B3	Product Name: Executive chair Manufacturer: TBD Model Number: TBD Location: Campus wide	
Office Side Chair	C1	Product Name: Side chair - Level 1 Manufacturer: TBD Model Number: TBD Location: Campus wide	
	C2	Product Name: Side chair - Level 2 Manufacturer: TBD Model Number: TBD Location: Campus wide	
	C3	Product Name: Side chair - Level 3 Manufacturer: TBD Model Number: TBD Location: Campus wide	
File Cabinet	D1	Product Name: File cabinet wide Manufacturer: TBD Model Number: TBD Location: Campus wide	
	D2	Product Name: File cabinet standard Manufacturer: TBD Model Number: TBD Location: Campus wide	
	E1	Product Name: Bookcase Manufacturer: TBD Model Number: TBD Location: Campus wide	
Conferencing Table	F1	Product Name: Conferencing table assembly - Level 1 Manufacturer: TBD Model Number: TBD Location: Campus wide	
	F2	Product Name: Side table assembly - Level 2 Manufacturer: TBD Model Number: TBD Location: Campus wide	
	G1	Product Name: Overhead storage Level 1 thru 3 Manufacturer: TBD Model Number: TBD Location: Campus wide	
Overhead Storage	G2	Product Name: Overhead storage Level 4 and up Manufacturer: TBD Model Number: TBD Location: Campus wide	
	H.1	Duplex elec outlet	
	H.2	Quad elec outlet	
	H.3	Data/Phone	
	H.4	Chair Matt	
	H.5	Panic Device	
	H.6	Combo Lock	
	H.7	Card Reader	
	H.8	Office Equipment	
	H.9	Lockset	
	H.10	Optional Item	
	H.11	Optional Item	

Fig. 13

## 2. CLASSROOMS, COMPUTER CLUSTERS AND CONFERENCE ROOMS

### Introduction

Effective allocation of classroom space on any University campus depends on multiple factors. Key among these are:

- **Classroom Space Assignments and Utilization Analyses**

Provision of adequate numbers and sizes of classrooms, in the appropriate locations, to serve academic needs. (How many large or medium-sized classrooms are needed, versus smaller seminar rooms, in what buildings, and available at what times?)

- **Classroom Space per Station or Seat**

Provision of correctly sized spaces *per seat* within any given classroom. (Are classrooms intended for 100 students in fact adequately sized to seat 100 students with the appropriate furniture?)

- **Classroom Technology Support**

Provision of technology. (Is the classroom capable of supporting the teaching needs of the faculty, even if it is large enough, in the right place, available at the right time, and with the appropriate space per student seat?)

- **Flexibility of Classroom Space**

Flexibility is a key factor in the design of classrooms. The configuration of the room and furniture layout should have the ability to change as the pedagogy evolves, and classroom

Designs should reflect this.

As these factors demonstrate, defining and allocating classroom space is a complex undertaking. The space planning guidelines in this document primarily address the second point noted above: guidelines for the appropriate amount of space provided in classrooms *per seat*, or *per student station*. The guidelines are most useful in helping to estimate the actual size of classrooms needed for new construction or for

renovation projects which revamp existing classroom space. They also help to assess the efficiency of existing classroom space, when concerns arise about the adequacy of existing rooms to accommodate assigned numbers of students.

These factors and issues are addressed on a regular basis by the Office of the Registrar, which centrally allocates, equips and schedules most of NJIT's classroom space. The Office of the Registrar, working with the Campus Planning, Design and Construction Department Space Management, weighs these issues and works with schools and Departments in the design of new classrooms and the renovation of existing rooms. The involvement of the Registrar is key because of the need to coordinate classroom uses and functions across the campus in order to meet NJIT's academic needs. The Offices of the Registrar and Campus Planning, Design and Construction Department Management also can help by advising key issues such as grouping classrooms, clustering classroom support, and providing formal and informal breakout spaces. All of these can affect classroom plans quite markedly.

## **2.1 Classrooms**

The table N.2 below provides a range of guidelines for different types of classroom spaces. Actual space per station, or per seat, in a classroom may vary depending on existing room configuration as well as type of furniture and seating used (fixed versus movable, tablet arms of varying sizes, tables, or theater-type seating). As classrooms are increasingly outfitted to accommodate sophisticated audiovisual equipment, streaming video, rear projection capacity, etc., the size of the rooms may need to be increased. Each classroom is equipped with the general basic technology needs which includes but is not limited to a projector , white board, Ethernet connection, and video capacity, etc. The guidelines below accommodate these types of needs. Recommendations for seminar rooms for 25 or fewer persons are also applicable to space planning guidelines for conference rooms.

## Classroom Space Guidelines

### Net Assignable Square Feet (nasf) per Station

Room Category	Room Capacity (No. Stations)	Movable Chairs W/Tablet Arm (TA) 15"- 20" Arms nasf	Fixed Pedestal or Riser Mounted Seating w/ TA nasf	Auditorium Seating nasf	Movable Table and Chairs nasf	Fixed Pedestal Table and Chairs nasf
Seminar/ Conference/ Small Class	0 – 25	17 - 24	17	--	16 - 26	20 - 22
Classrooms	26 – 49*	16 - 18	17	--	16 - 26	18 - 20
Classrooms	50 – 99	14 - 16	13	14 - 17	16 - 22	18 - 20
And	100 – 149	--	12 - 14	12 - 15	16 - 22	18 - 20
Lecture	150 – 299	--	--	10 - 14	16 - 22	17 - 19
Rooms	300 +	--	--	10 - 14	16 - 22	16 - 18

**Table N.2 - Classroom Space Guidelines nasf per Station**

\*Seating capacity per fire codes for most classrooms with only one entrance/exit door should not exceed 49.

## 2.2 Design Elements for General Purpose Classrooms

NJIT's philosophy for classroom design is to provide a safe, comfortable, and accessible space where learning can take place uninterrupted. The layout and design of the classroom has a significant effect on the quality of education. Attention to acoustics, lighting, and color scheme may reduce distractions and aid concentration.

## **Accessibility**

- All newly constructed or renovated general-purpose classrooms shall include accessible seating.
- NJIT's standard accessible station is an adjustable table and non-flexible chair. Contact the NJIT, Planning, Design and Construction Department for vendor information.
- The number of accessible desks is depended on the capacity of the room. Large lecture halls typically will have two, while smaller classrooms will have one.

## **Sound and Acoustics**

- Larger rooms should have a sound system or speakers that amplifies the instructor's voice and the materials presented. Sound should be evenly distributed throughout the room.
- Ensure there is enough soundproofing between classrooms and their adjacent spaces to provide a comfortable learning and teaching environment.
- Be aware of acoustics within the room, especially larger spaces. Slight changes or enhancements to furniture and finishes can reduce echoes and reverberations.

## **Lighting**

- Rooms with windows should have shades or blinds to reduce and cut out daylight. This will allow any projected digital displays to be more visible.
- Overhead lighting should allow for a variety of lighting scenarios from full illumination to subdued lighting for projection.
- Lighting near the display should be controlled separately from the overhead lights. Tiered vs. Level Floors
- Level floors offer the most flexibility in day to day use and are more cost effective to renovate.
- Tiered floors are typically constructed in larger capacity rooms to improve sight lines. A classroom should move towards a tiered configuration if the



number of rows of seats exceeds six.

- Addressing accessibility requirements is more challenging in tiered rooms and typically requires additional space for ramps and/or elevators/lifts.

## **Flooring**

- Carpeted flooring is generally recommended in larger lecture halls and can provide better acoustics in classrooms.
- Wood or other non-tile flooring options have different maintenance and upkeep requirements and are not recommended.
- Carpet color and patterns should be selected from the NJIT standard finishes maintained by NJIT, Planning, Design and Construction Department.

## **Paint**

- Paint color should be selected from the NJIT standard finishes maintained by the NJIT, Planning, Design and Construction Department.

## **Furniture**

### **Moveable Tablet Arm Chair:**

- Compared to other furniture styles, moveable tablet arm chairs allow for the greatest number of seats in a single classroom.
- Allows for easy transition between lecture and smaller group discussions.
- Rooms with flexible furniture are difficult to keep in a specific arrangement. Extra time may be required to reset furniture to the preferred configuration.

### **Fixed Tablet Arm Chairs**

- Fixed tablet arm chairs are better suited for larger capacity classrooms since resetting moveable furniture in these rooms would be time consuming.
- Breaking into small groups can be difficult due to the fixed seating arrangement.

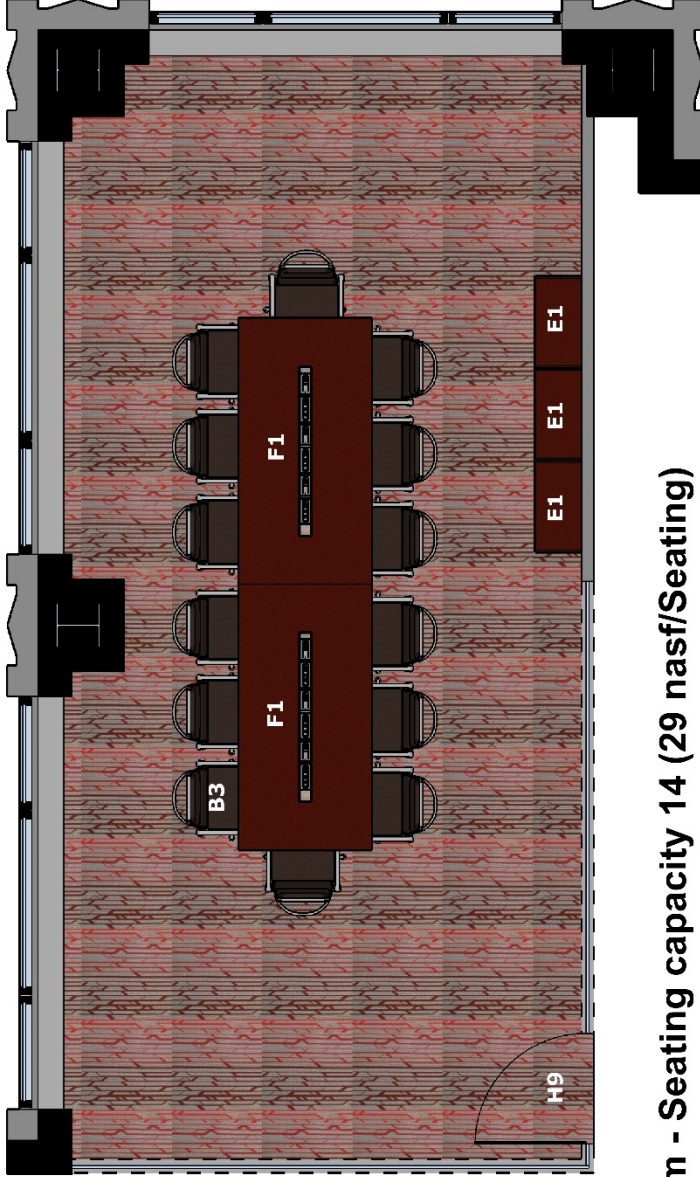
## **Moveable Tables and Chairs**

- Moveable tables can be configured into a number of room styles: rows, boardroom, and seminar.
- New table designs offer a wide variety of shapes and sizes for desired classroom objectives. For example, circular or hexagonal tables are ideal for collaborative learning and instruction.
- Moveable tables are difficult to wire for power because of the mobility. If power is necessary, floor outlets can be installed throughout the floor using a raised flooring system.

## **Fixed Table and Chairs**

- Fixed tables are better suited for larger capacity classrooms since resetting moveable furniture in these rooms would be very difficult and time consuming.
- Tables bolted to the floor or wired for power tend to only be changed in a significant renovation.

The following figures show layouts for a variety of classroom spaces and configurations. These layouts are not intended to be exhaustive; rather they are illustrations of some typical classroom sizes and formats at NJIT.

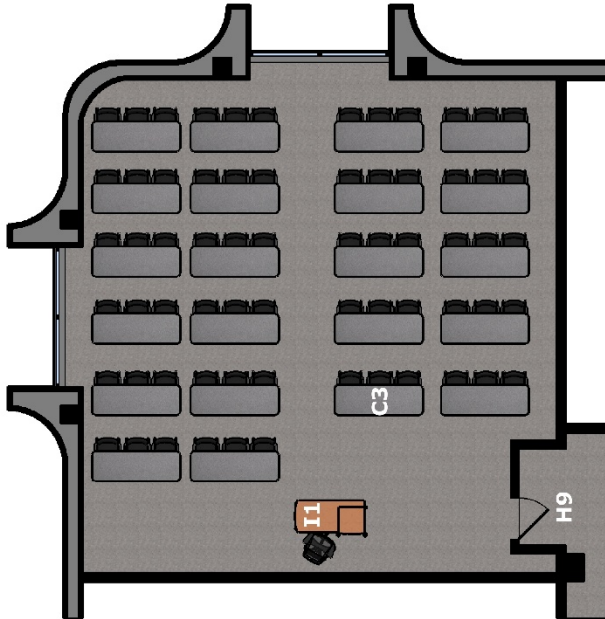


## Conference Room - Seating capacity 14 (29 nasf/Seating)

### Space Options & Finish Schedule

Space Options & Finish Schedule		GENERAL NOTES																CARPET TYPE STANDARDS															
Area: 1200 Sq Ft Approximated		COLOR		MATERIAL		D. HARDWARE				AV / DATA				GENERAL NOTES				Manufacturer: Shaw Bright Work Allure #59327 Color: Spark #27500 Location: FMH				Manufacturer: Crosswalk Color: Video Decoder #14403 Location: GTC 3rd Floor				Manufacturer: Shaw Bright Work Allure #59327 Color: Spark #27500 Location: FMH							
Item.	Description	GREY STORM	WOOD LIGHT	TBD	LAMINATED WOOD	WOOD PANELING	TBD	EXPOSED CONC.	COMBO LOCK	EVEREST 29	SCHLAGE	CARD READER	DATA/TELEPHONE	DUPLEX OUTLET	QUAD OUTLET	PANIC DEVICE	Manufacturer: Tandus Artisan #03579 Color: Argillite #43713 Location: Fensler, GTC, CAS	Manufacturer: Shaw Bright Work Allure #59327 Color: Spark #27500 Location: FMH	Manufacturer: Crosswalk Color: Video Decoder #14403 Location: GTC 3rd Floor	Manufacturer: Shaw Bright Work Allure #59327 Color: Spark #27500 Location: FMH													
A6.	Shared space cubicle																																
I.1	Lecturer Main Desk																																
D2.	File/Equipment Cabinet																																
E1.	Bookcase																																
B3.	Main Chair																																
H4.	Chair Mat																																
F2.	Side Table																																
F1.	Conferencing Table																																
H10.	Projector/ Special Equip.																																
H11.	Optional Items																																
H9	Lock/Set Hardware																																

Fig. 14



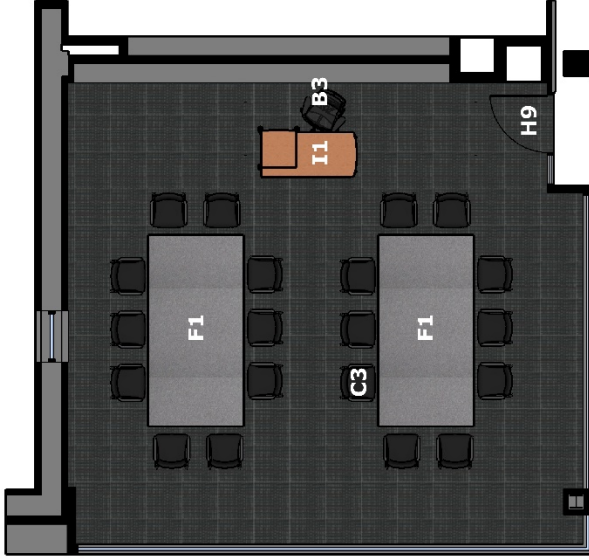
**KUPF 205 - Medium Classroom with fixed pedestal tables**

## Space Options & Finish Schedule

[illegible]

**Fig. 15**



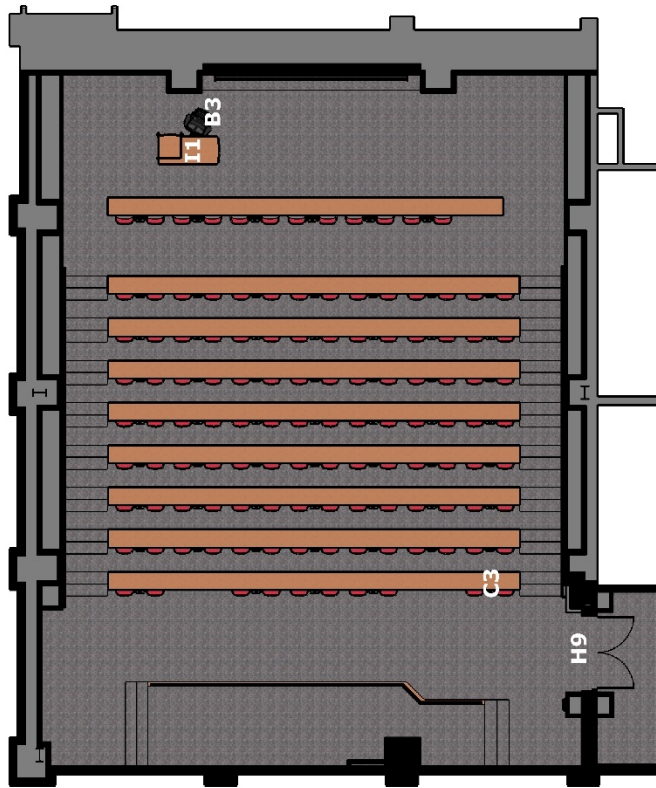


## CKB 316 - Small Classroom with moveable tables

### Space Options & Finish Schedule

Area	1200 sq.ft Approximated	GENERAL NOTES	CARPET TYPE STANDARDS	TILE STANDARDS
Item	Description	1. Ceiling heights are approximate 2. Wall texture: Semi-imperfect 3. All stained and exposed concrete shall be sealed	Manufacturer: Tandus Artisan #03579 Color: Location: Fenster, GITC, CAB	Manufacturer: Shaw Bright Work, Allure Tile #99327 Color: Spark #27500 Location: FMH
C3	Main Chair / Table			
I.1	Lecturer Main Desk			
D2	File/Equipment Cabinet			
E1	Bookcase			
B3	Lecturer Main Chair			
H4	Chair Mat			
F2	Side Table			
F1	Conferring Table			
H10	Projector/ Special Equip.			
H11	Optional Items			
H9	LockSet Hardware			

Fig. 16



## GITC 1400 - Auditorium/ Lecture Hall

### Space Options & Finish Schedule

Area: 2500 sq.ft Approximated		GENERAL NOTES														CARPET TYPE STANDARDS			
Item.	Description																		
		COLOR	MATERIAL	D. HARDWARE	AV / DATA											Manufacturer: Shaw Central Line Color: Market Ced #7206 Location: Campus Center	Manufacturer: Manning Crosswalk Color: Video Decal #4450 Location: GITC 3rd Floor	Manufacturer: Shaw Bright Work, Allure Tile #8937 Color: Spark #427500 Location: F101	
C3.	Main Chair / Table																		
I.1	Lecturer Main Desk																		
D2.	File/Equipment Cabinet																		
E1.	Bookcase																		
B3.	Lecturer Chair																		
H4.	Chair Mat																		
F2.	Side Table																		
F1.	Conferencing Table																		
H10.	Projector/ Special Equip.																		
H11.	Optional Items																		
H9	LockSet Hardware																		

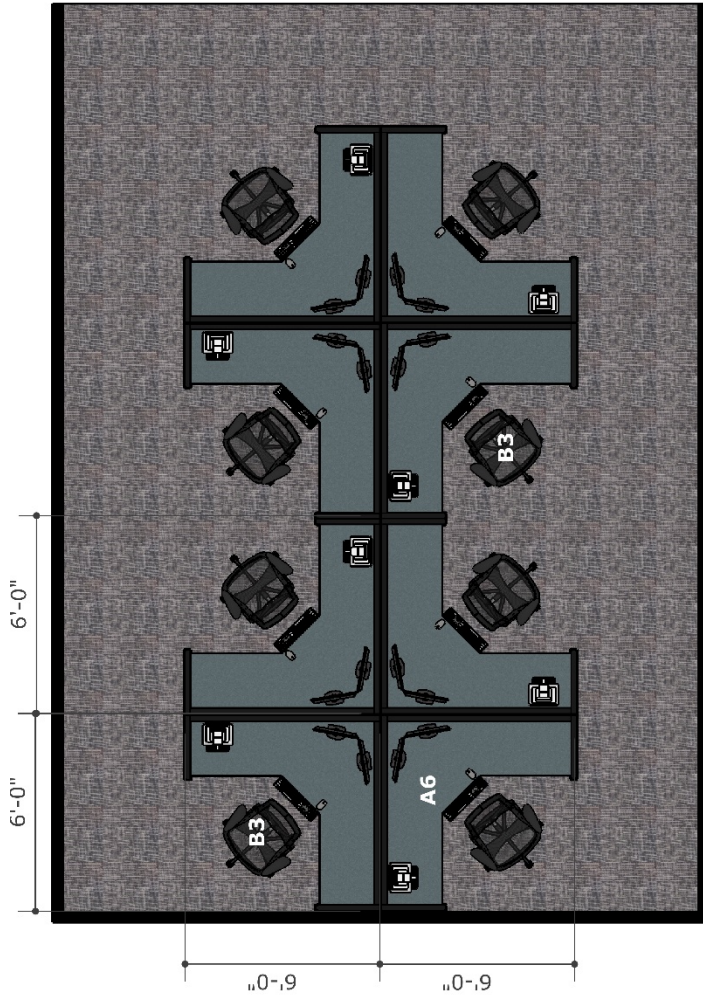
Fig. 17

## 2.3 Computer Clusters

Computer clusters, which are areas available for student use on a casual or an assigned basis, should provide approximately 30-36 nsf per workstation. Media Services and Campus Planning, Design and Construction Department work with specific schools or Departments requesting space to develop creative approaches for design of spaces to house computer clusters. This is particularly important in rooms or areas with challenging building configurations. An alternative to the single seat per machine is a shared workstation model, with two or more students sharing terminals for group projects. Terminals can also be effectively used lined up along wide corridors or along building walls in larger rooms. When designing a computer lab, it is important to provide adequate space on the work surface for notebooks and papers in addition to monitors and CPUs. Some computer lab work areas should be height adjustable or at a 32 inch height to accommodate wheelchair access.

The following figures provide sample layouts of computer clusters.





## Computer Cluster









### Space Options & Finish Schedule

Area	36 nsaf per station																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
------	---------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

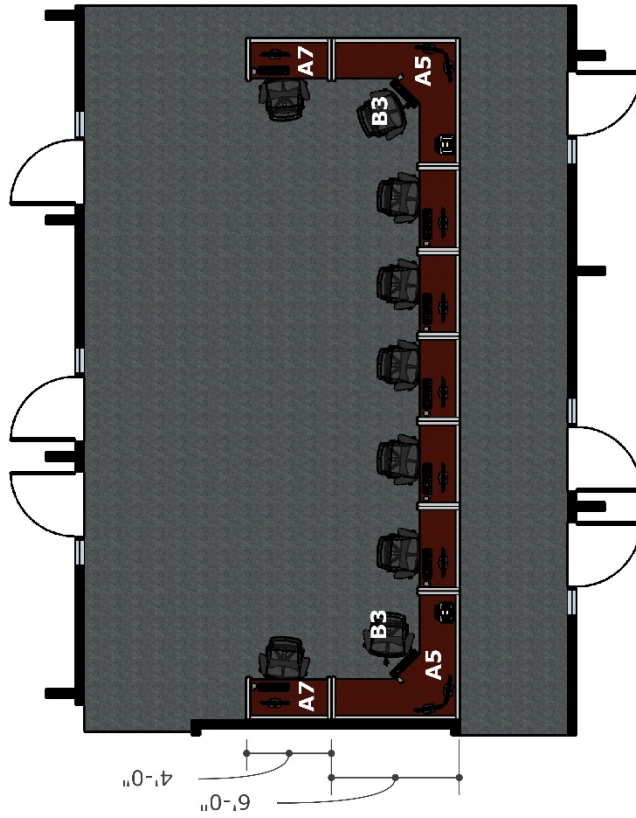
Fig. 18



## Space Options & Finish Schedule

Space Options & Finish Schedule									
Area		Varies							
Item		Description							
A6.	Shared space cubicle								
I.1	Lecturer Main Desk								
D2.	File/Equipment Cabinet								
E1.	Bookcase								
C3.	Main Chair								
H4.	Chair Mat								
F2.	Side Table								
F1.	Conferencing Table								
H10.	Projector/ Special Equip.								
H11.	Optional Items								
H9	LockSet Hardware								
GENERAL NOTES									
1. Ceiling heights are approximate									
2. Wall texture: Semi-Imperfect									
3. All stained and exposed concrete shall be sealed									
COLOR		MATERIAL		D. HARDWARE		AV / DATA		GENERAL NOTES	
GREY STORM	WOOD LIGHT	TBD	LAMINATED WOOD	COMBO LOCK	EVEREST 29	CARD READER	DATA/TELEPHONE	DUPLUX OUTLET	QUAD OUTLET
		WOOD PANELING	TBD	EXPOSED CONC.					PANIC DEVICE
CARPET TYPE STANDARDS									
Manufacturer: Tandus Artisan #63579 Color: Agillite #43713 Location: Fenster, GTC, CAB	Manufacturer: Shaw Criminal Line Color: Market Red #72506 Location: Campus Center	Manufacturer: Mingon Coastalk Color: Video Decoder #14403 Location: GTC 3rd Floor	Manufacturer: Shaw Bright Work Allure Tile #59327 Color: Spark #27500 Location: FMH						
									
TILE STANDARDS									
Manufacturer: Color: Location:	Manufacturer: Color: Location:	Manufacturer: Color: Location:	Manufacturer: Color: Location:						
									

**Fig. 19**



**FENS 242 - Computer Cluster (36 nasf per workstation)**

## Space Options & Finish Schedule

Space Options & Finish Schedule			
Area	Varies		
Item.	Description		
A5.7	Shared space cubicle		
I.1	Lecturer Main Desk		
D2.	Filer/Equipment Cabinet		
E1.	Bookcase		
B3.	Main Chair		
H4.	Chair Mat		
F2.	Side Table		
F1.	Conferencing Table		
H10.	Projector/ Special Equip.		
H11.	Optional Items		
H9	LockSet Hardware		

**Fig. 20**

## **2.4 Conference Rooms**

- **Guidelines**

For the purpose of these guidelines, a Conference Room is considered as a meeting space planned for 25 or fewer people.

Conference Room space is defined according to the same criteria as Seminar Rooms, with seating around a table, space for audio/visual equipment and presentations, and space for food service or other conference needs as required.

- **Determining the Number of Conference Rooms Required**

The range of space for a small seminar room or conference room of 0 – 25 people is approximately 16 to 26 nsf per person. The larger area is for a room with space for audio/visual equipment, a screen and/or white board for projection and display, bookcases or shelves, and a serving area for buffet food or coffee service. The smaller areas per person are for conference rooms without these capabilities.

The total amount of Conference Room space required to serve a grouping of office areas varies widely. The following guidelines serve as frameworks for determining the number of conference rooms in each area, knowing that particular circumstances might lead toward the development of varying numbers of rooms for different types of areas.

In predominantly private office environments (defined as areas with a majority of offices, minority of cubicles), the guideline is:

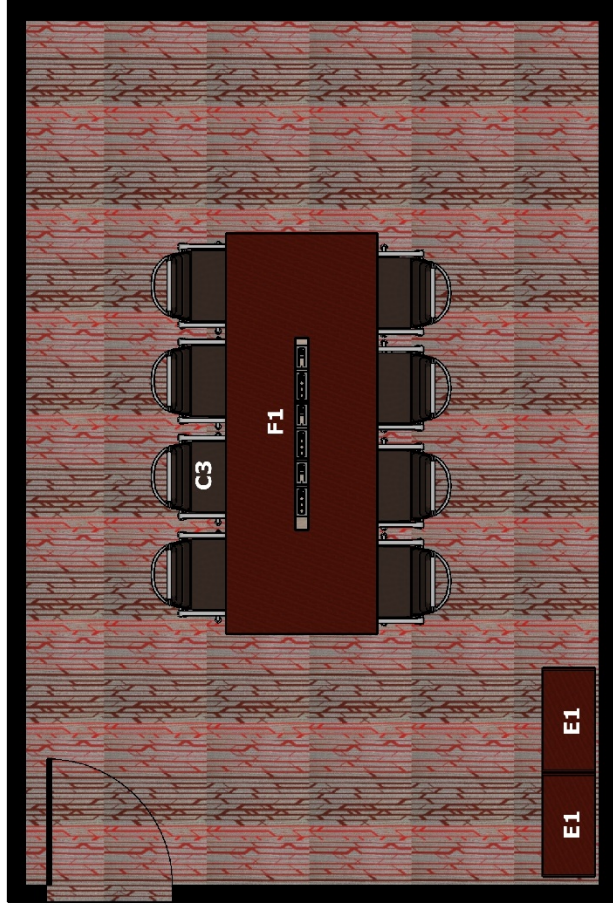
- 1 conference/meeting space for every 20 people 2/3 of these spaces should be for 8-10 people 1/3 of these spaces should be for 5-7 people  
(Alternatively, all spaces can be sized for 10-15 people and then divisible into smaller rooms. Feasibility of doing this depends upon requirements for soundproofing, cost, etc.)  
There might be one larger space per floor (holding 20-30 people)

In predominantly open office environments (defined as areas with a majority of cubicles and a minority of offices), the guideline is:

- 1 conference/meeting space for every 10-12 people 2/3 of these spaces should be for 8-10 people  
1/3 of these spaces should be for 5-7 people  
(Same comment as above on creating divisible rooms.) Additional tiny spaces (phone room size) might be needed  
There might be one larger space per floor (again, for 20-30 people)

The following layouts provide some sample conference room plans. In addition, the classroom plans in the previous section show larger size conference room options.





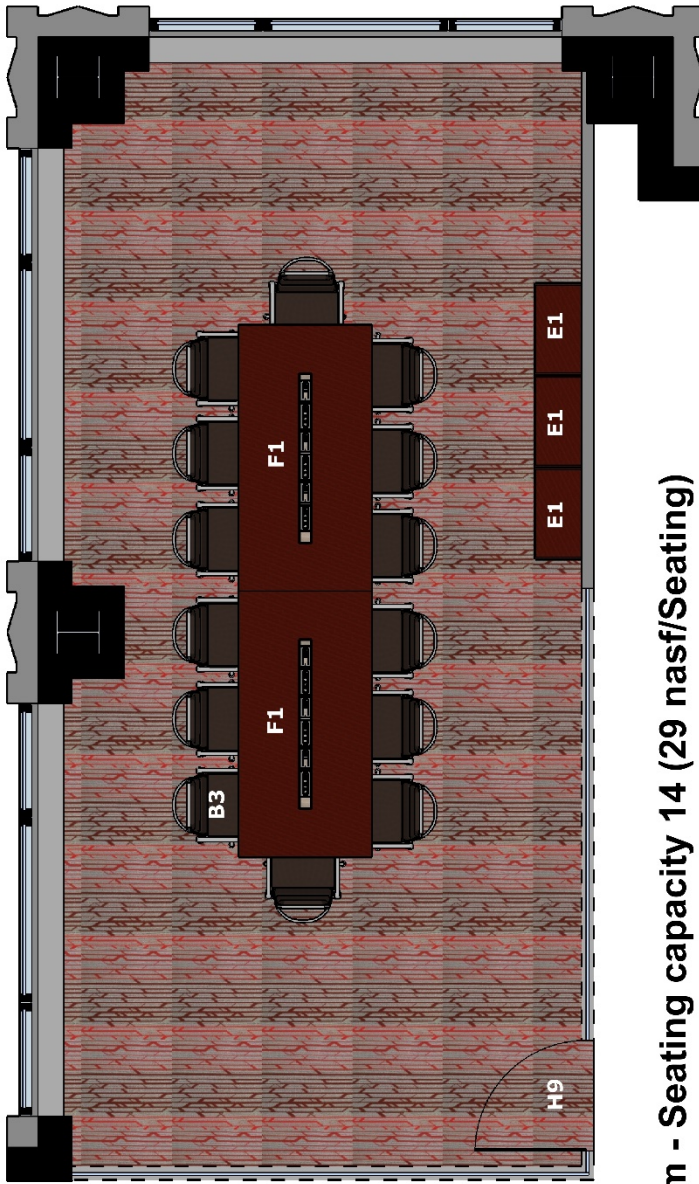
## GITC 4323A - Small Conference Room

### Space Options & Finish Schedule

Area	280 Sq Ft Approximated	Item	Description	Color	Material	D. Hardware	AV / DATA	GENERAL NOTES	CARPET TYPE STANDARDS	TILE STANDARDS
A6.			Shared space cubicle					1. Ceiling heights are approximate 2. Wall texture: Semi-imperfect 3. All stained and exposed concrete shall be sealed	Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center	Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center
I.1			Lecturer Main Desk						Manufacturer: Tandu Artisan #03579 Color: Argillite #43713 Location: Fenster, GITC, CAB	Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center
D2.			File/Equipment Cabinet						Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center	Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center
E1.			Bookcase						Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center	Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center
C3.			Main Chair						Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center	Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center
H4.			Chair Mat						Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center	Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center
F2.			Side Table						Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center	Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center
F1.			Conferencing Table						Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center	Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center
H10.			Projector/ Special Equip.						Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center	Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center
H11.			Optional Items						Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center	Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center
H9			LockSet Hardware						Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center	Manufacturer: Shaw Color: Maroon Red #72506 Location: Campus Center

Fig. 21





**Conference Room - Seating capacity 14 (29 nasf/Seating)**

## Space Options & Finish Schedule

Space Options & Finish Schedule

Area

1200 Sq Ft Approximated

Item

Description

A6.

Shared space cubicle

I.1

Lecturer Main Desk

D2.

File/Equipment Cabinet

E1.

Bookcase

B3.

Main Chair

H4.

Chair Mat

F2.

Side Table

F1.

Conferencing Table

H10.

Projector/ Special Equip.

H11.

Optional Items

H9

Lock/Set Hardware

Color

Material

D. Hardware

AV / DATA

General Notes

Grey Storm

Wood Light

TBD

Laminated Wood

Wood Paneling

TBD

Exposed Conc.

Combo Lock

Everest 29

Schlage

Card Reader

Data/Telephone

Duplex Outlet

Quad Outlet

Panic Device

1. Ceiling heights are approximate

2. Wall texture. Semi-imperfect

3. All stained and exposed concrete shall be sealed

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #14403 Location: GTC 3rd Floor

Manufacturer: Shaw Worland Color: Market Resil #72506 Location: Campus Center

Manufacturer: Tandus Artisan #03579 Color: Agillite #43713 Location: Fenster, GTRC, CAB

Manufacturer: Shaw Worland Color: Agillite Resil #72506 Location: Spark #27500 Location: FMH

Manufacturer: Commercial Color Dura-Dyn #

**Fig. 14**

### **3. RESEARCH AND LABORATORY SPACE**

#### **Introduction**

Research and laboratory space needs and guidelines vary markedly between schools and Departments, types of research being undertaken, and special equipment needs. There are a number of different types of laboratories that exist on campus, including (among others):

- Computational laboratories
- Wet laboratories
- Dry laboratories
- Studio or design-based laboratories
- Teaching laboratories
- Special large equipment or instrumentation laboratories

The allocation of research and laboratory space within schools and Departments is determined by Department chairs in collaboration with the school Dean.

When additional space is needed, and/or substantial space revisions are requested for research functions, Campus Planning, Design and Construction Department assists schools with defining the specific types of research spaces required, and then with benchmarking, comparative studies, and laboratory designs. This helps to ensure flexibility, modularity and consistency in space allocation, as well as efficient use of existing space and comprehensive planning of proposed new space. Campus Planning, Design and Construction Management works with schools to define areas such as student space, core facility spaces, common equipment areas, etc.

### 3.1 Planning Themes

While laboratory types vary markedly and can be so specialized as to defy space planning guidelines, there are some common themes to keep in mind in laboratory space planning. Some of these are as follows:

**Modularity** – Making laboratory design as modular as possible is key, particularly in terms of HVAC design, specialized systems and structural loading designs. This is important because, given the increasingly fast pace of change in science disciplines and techniques, we need to be able to modify and improve lab settings as science evolves and changes.

**Flexibility** – While each lab is different and many specialized features are required, it is important to plan laboratory spaces as flexibly as we can both because of the changes in science mentioned above and also because research programs ebb and flow over time. Flexibility in design enables us to allocate additional space easily, as research programs grow or shrink. Often flexible planning enables us to co-locate similar laboratory programs, which furthers scientific goals and encourages collaboration.

**Zoning** – Creating laboratory “zones” which also enable flexibility and ease of operations is very important. Environmental Health and Safety Department ADA codes are critical here.

Shared Laboratory Support and related spaces – Sharing of laboratory support rooms and functions has become much more common today than was the case in the past. Continuing to develop shared support spaces is critical in constraining costs, using space efficiently, and being able to provide state-of-the-art spaces. It is important that these kinds of shared spaces are planned well from the very start, so that sharing can be accommodated. Examples of support and other spaces that should be considered for sharing include:

- Seminar and conference rooms
- Student spaces (for maximum flexibility, these should be interchangeable, rather than dedicated to individual faculty research groups)
- Computer clusters and labs
- Preparation rooms – (there is a large range here – everything from rooms to prepare rocks and minerals to those housing chemicals and cultures)
- Storage rooms
- Dark rooms
- Sinks
- Equipment rooms – (again, a large range – from microscopes to isotopes and other specialized equipment)
- Cold rooms
- Greenhouses
- Analysis rooms

**Utilization** – Laboratory space is the most expensive space that any University develops. It is critical that this type of space is well used. This would require the department to perform regular monitoring and assessment of the space. For example, a wet lab space being used to store materials rather than engaging in an active research program is not an optimal use. Assessing utilization involves:

- Performing regular utilization walk-throughs and studies;
- Evaluating how many researchers are housed in each research space;
- Assessing how active the research program is (measures commonly used include publication activity, grants, awards, etc.), and
- Determining how critically important the research is to the University or school's academic mission.



**Service Centers and Core Facilities** – Developing core facilities, which in some cases become service centers, is another way of sharing laboratory facilities that could not be developed or housed by individual investigators. This can save markedly on the cost of expensive laboratory equipment, as well as energy and other operations costs. These facilities need to be well staffed and organized, so that the equipment and research needs of all parties are well met.

**Accommodating storage needs** – We have all seen laboratories that begin to look like storage rooms, either because there is no other storage available or because researchers cannot dedicate time to developing storage options. It is important that storage for laboratories is carefully thought out, so that the highest and best use of laboratory spaces can be achieved.

These themes have different applications in laboratory design, depending upon the type of laboratory (wet labs are very different than computer or teaching labs, for example). Nonetheless, they are important themes to keep in mind as planning tools.

### **3.2 Guidelines**

As mentioned above, research space needs can vary widely, ranging from a computer workstation to a large engineering lab with a wind tunnel installation. The following present some general planning guidelines that can be followed in many cases with regard to wet laboratories in the biological and medical sciences, as well as dry laboratories (including those with and without teaching lab needs.) Additional guidelines are being developed by Campus Planning and Design as a resource for the campus related to other types of laboratory spaces. In the coming years, we plan to develop guidelines for the following additional laboratory types:

- Wet Laboratory (Chemistry)
- Computer Laboratory
- Instrumentation Laboratory
- Teaching Laboratories (being developed as part of the shared teaching lab building planning)
- Core Facilities

### **3.3 Wet Laboratories – Introduction**

While laboratory needs vary widely between disciplines, as mentioned above, NJIT's goal is to configure laboratory space in as flexible and modular a way as possible because of the fact that research needs and methods change and evolve over time. Laboratory space is typically configured in standard laboratory modules, which become space denominators that are designed to meet a variety of research needs. These modules allow for flexibility in planning the following: mechanical/electrical/plumbing (MEP) systems; heating, cooling and ventilation (HVAC) systems; casework; laboratory support spaces; specialized functions; partitions; fume hoods; etc.

Laboratory modules, then, become the building blocks for planning research space. Larger units can be created by aggregating a number of modules, and by the same token smaller laboratories can be created with portions of modules. The number of modules allocated to each researcher is based on the type of work being done, and the associated requirement for research space. This allocation of research space can ebb and flow over time, as research programs change. The planning module is repetitive and regular, and enables flexibility in design. The size varies depending upon the depths requires for special equipment or particular research purposes. The actual layout and zoning of the laboratory modules depends upon the specific laboratory function and research needs, including sinks, fume hoods, and special support, as well as the building floor plan. For example,

the relationship between laboratory and office zones, or between laboratory and support space, will vary depending upon the type of research and laboratory need. The module component will remain standard while the ways in which the modules are arranged will differ from laboratory to laboratory.

## **Typical Bench Length and Width**

The width dimension of a standard bench lab module for this lab type is typically 10'6". This dimension accommodates wall thickness and 30" deep benches on either side of a 5' wide aisle (the 5' aisle is wide enough to accommodate people working back to back at opposite benches, the 60" ADA wheel chair turning diameter, and a 36" wide in swinging door with the ADA required 18" clear area next to the strike). A significantly greater width becomes inefficient and gains little in additional functional workspace unless it is to accommodate unusually large pieces of research equipment that might be 3' or 4' deep. A significantly narrower width becomes too tight to allow efficient functioning room for lab technicians, students or researchers who use lab benches and equipment on both sides of the room.

The length dimension of a single standard bench lab module varies. This dimension is according to a building's structural system or plan configuration. The critical dimension is the width, not the length, of the wet lab bench module. Ideally, lab module lengths are multiples of their width. This adds flexibility to the building or space in that modules (benches and aisles) can be arranged longitudinally or transversely without loss of efficiency.

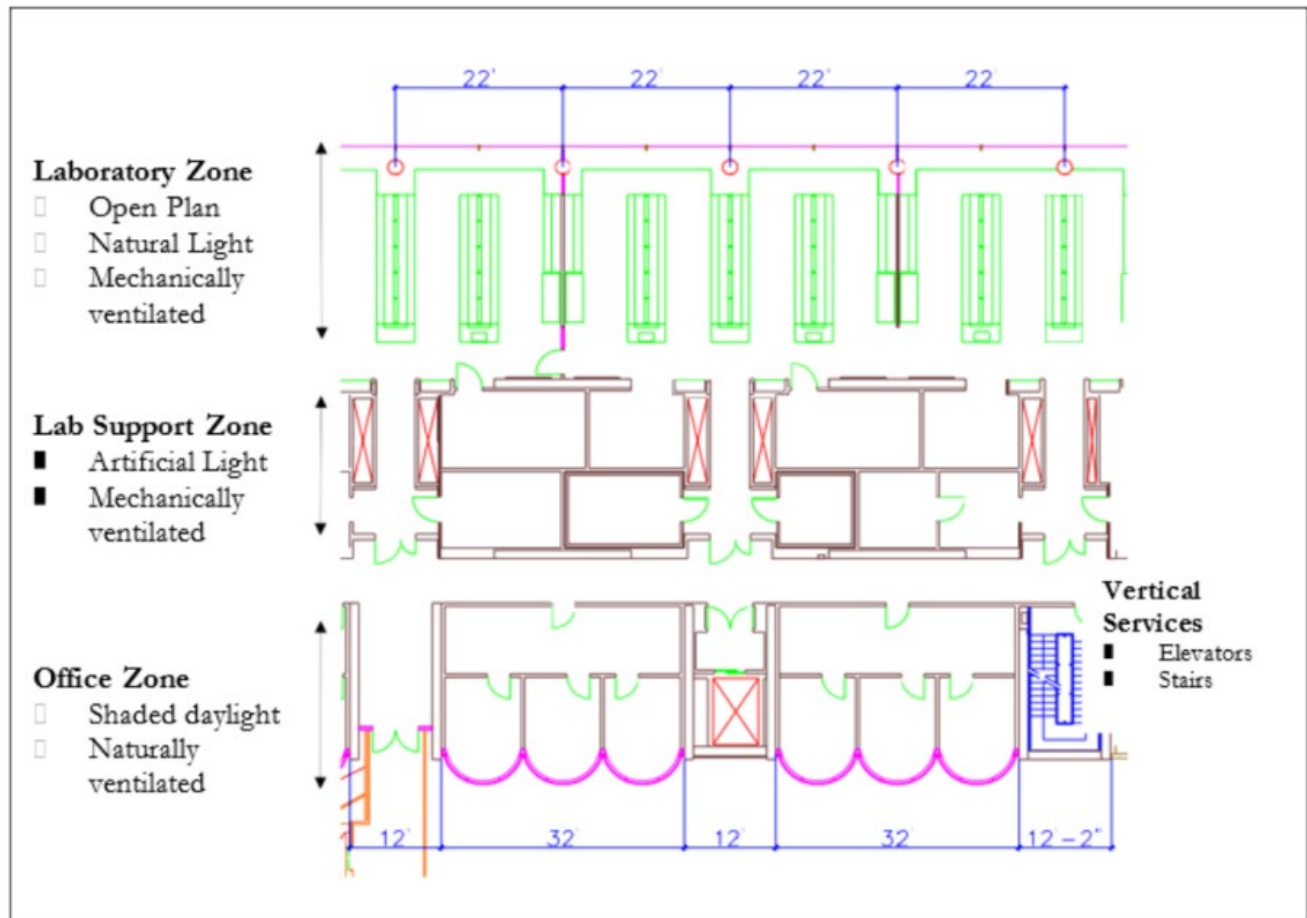
At a typical 10' length, one standard wet lab bench module becomes approximately 110 nasf (11' wide x 10' long.) Two lab modules are often placed end-to-end to make one longer lab of 220 nasf (11' wide x 20' long.) In addition, two or more lab modules can be placed side-by-side, creating double or triple width labs. In this case, the intermediate "side" walls are eliminated and the lab benches in the center become double-width island benches, providing workspace on both sides.

## **Important Factors**

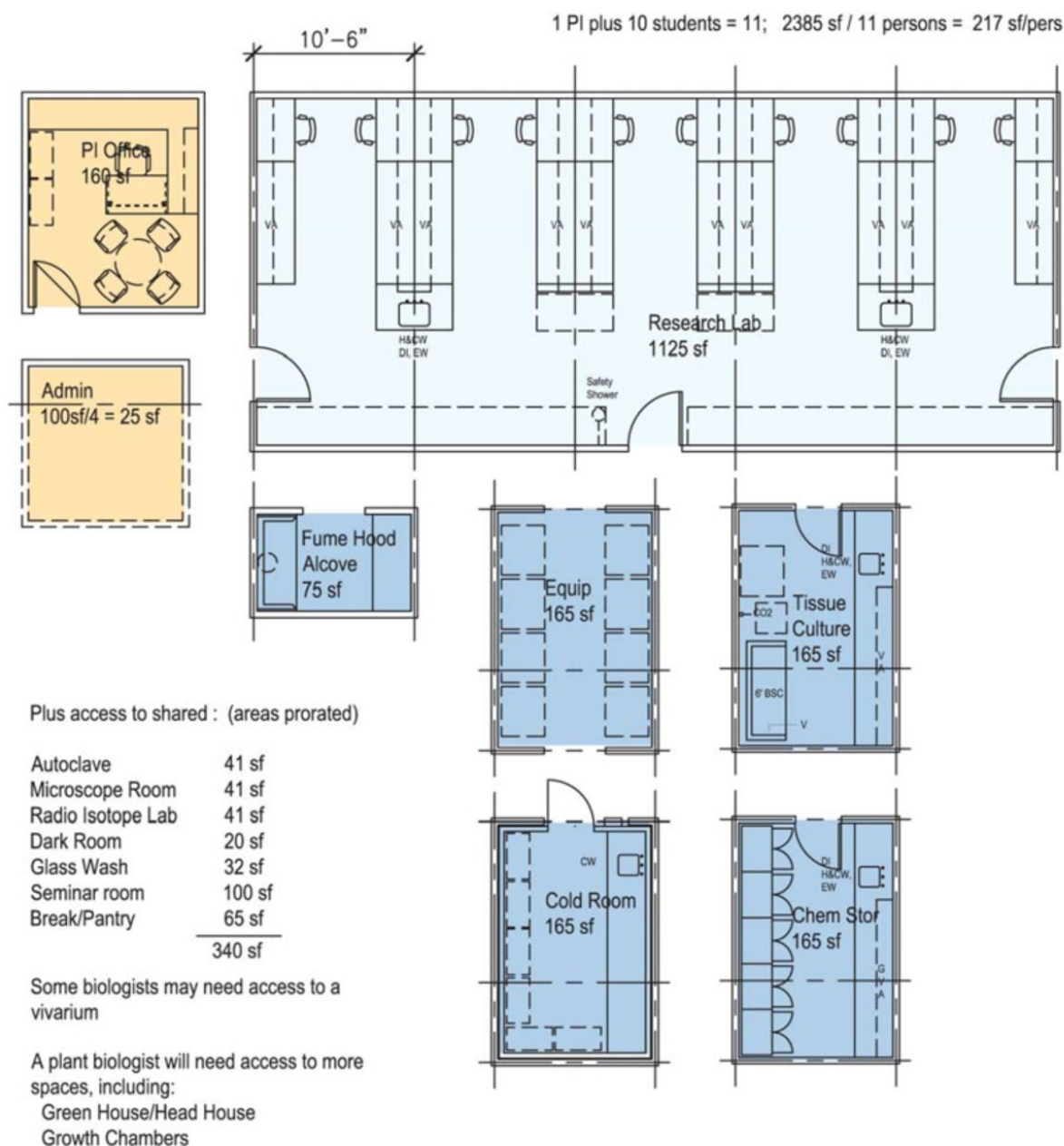
In this type of modular planning, Campus Planning, Design and Construction Department also brings in comparable benchmark data from similar research facilities, as applicable and available, to inform the design. An important factor in the overall building layout for research laboratories are seismic standards, particularly in larger buildings with deeper floor plates. In order to meet seismic requirements, the layout of laboratory, support and office space often needs to be varied at the middle and ends of buildings in order to accommodate bracing and/or shear walls.

The following figures give a sense of this modular format. As mentioned above, the overall layout of this modular format will vary throughout buildings for seismic and other structural reasons.





**Figure 22 - Typical Laboratory Layout**

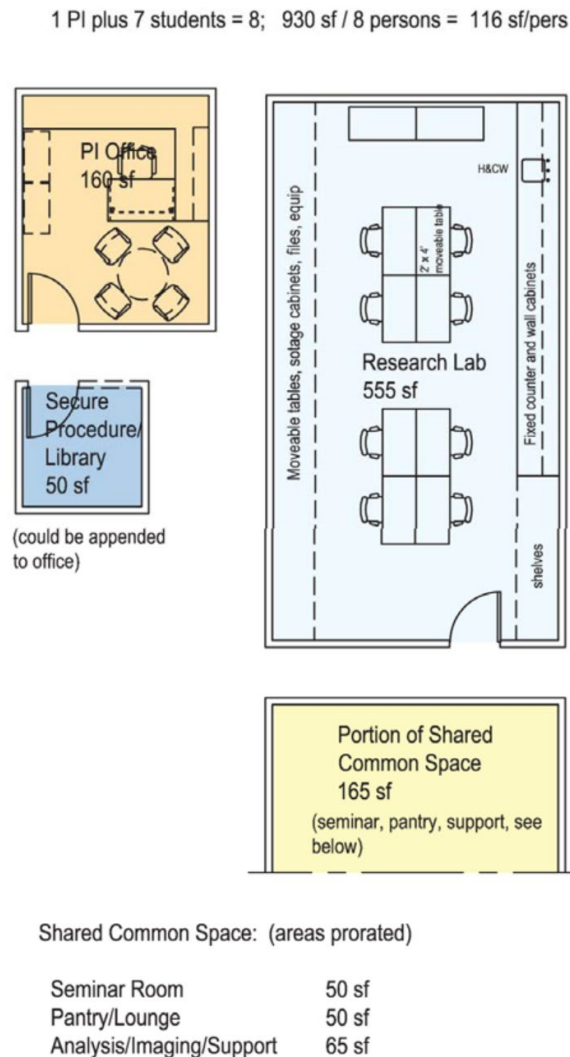


**Figure 23 Typical Wet Laboratory Layout ~2,385 sf per PI**

### 3.4 Dry Laboratories

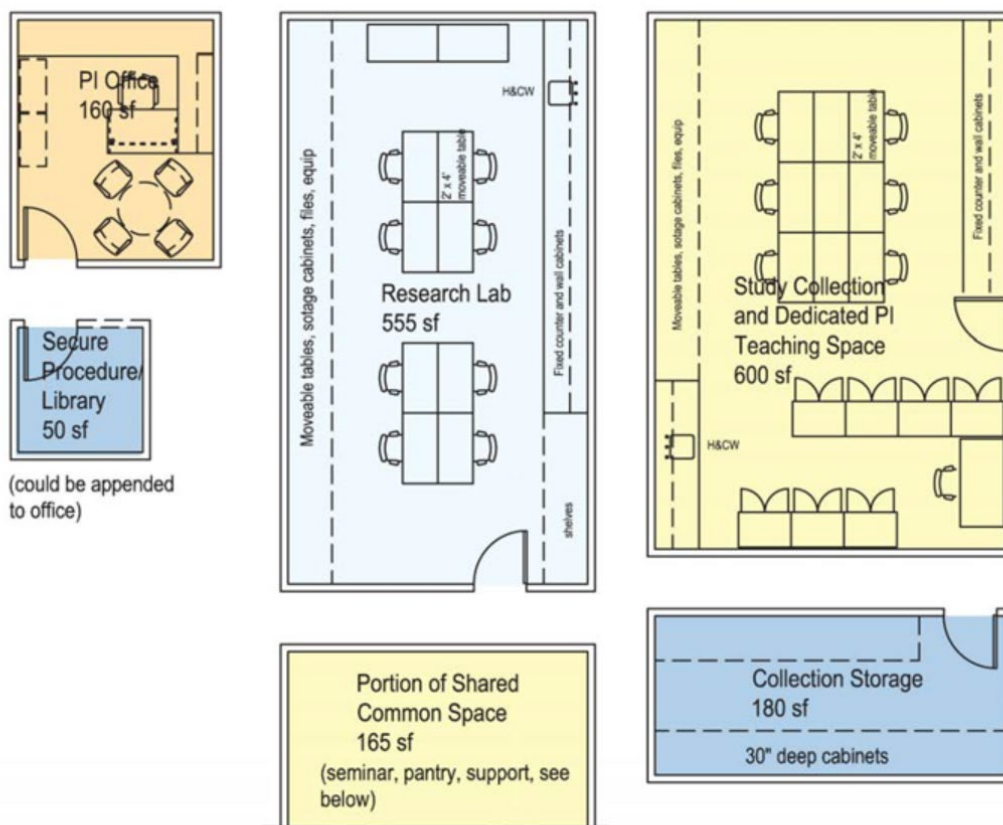
Dry laboratories can also be designed with modularity described in the previous section on web laboratories. As in wet labs, many of the support spaces can be shared. Moveable tables and storage cabinets can lend flexibility for changing research needs over time.

The following figures give a sense of dry laboratory ideas. Figure 14C shows a typical research space and Figure 14D shows a research space with the addition of dedicated teaching and storage space.



**Figure 24 Typical Dry Laboratory Layout ~930 sf per PI**

1 PI plus 8 students = 9; 1710 sf / 9 persons = 190 sf/pers



Shared Common Space: (areas prorated)

Seminar Room	50 sf
Pantry/Lounge	50 sf
Analysis/Imaging/Support	65 sf

**Figure 25 Typical Dry Laboratory Layout with addition of Teaching Space ~1,710 sf per PI**



## **4. OTHER SPACES**

### **Introduction**

There are a number of other spaces that present challenges in planning and/or renovating buildings. Some of these include office service space, storage space, kitchen space, and touchdown space. While we have not developed square footage guidelines to size and plan these types of spaces, we offer the following observations and planning ideas related to their development. We will be working to develop additional guidelines on these types of spaces, and welcome thoughts, comments and perspectives.

#### **4.1 Office Service Space**

There is sometimes the tendency to design office service space for individual workgroups, which can result in cramped and poorly organized spaces that don't operate particularly well. Office service space is generally much more effective when it is centralized on a floor or in one location. This should be the focus, and this often can include sharing such space between groups. Separate office service spaces for each small group should be discouraged, for space utilization reasons as well as for cost reasons (equipment costs that could be shared – copiers, postage meters, printers, etc.) and for sustainability reasons (such as energy costs resulting from operating duplicative equipment group by group and procurement costs resulting from small orders of the same supplies rather than one larger order.)

## 4.2 Storage Space

Campus Planning, Design and Construction Department undertook a study of storage on campus. In general, the study found that NJIT schools and units manage their storage well and do not have extensive storage issues and problems, with a few exceptions. These exceptions are usually for reasons of specialized storage needs (scientific equipment, physical specimens used in research, files with long-term storage regulations, etc.) In these cases, special storage solutions need to be developed and monitored. Whenever possible, this type of specialized storage should be off-campus so that on-campus space can be used for active academic programs priorities.

As a result of the study above, Campus Planning and Design developed storage policies for the campus centralized on campus storage space and the off-campus storage that is available (Newark warehouse).

For day to day storage of routine materials on campus, we have developed a few key guidelines as a result of the study:

- On-campus storage ideally should not exceed 5% of any school or area's total space. If storage exceeds this percentage, an assessment should be made of solutions and alternatives.
- Storage should not be housed in windowed offices.
- The following types of materials are appropriate for on-campus storage:
  - Materials that require short-term storage due to a renovation project or an office move/remodel (moving costs are generally covered by project budget);
  - Documents or materials required for grants and/or research projects (the time frame required must be specified);

- Documents or materials required for personnel or legal actions (the timeframe required must be specified);
  - Materials required for teaching laboratories, classroom use or other educational uses.
  - Materials necessary to the academic mission of the (school/area) which may include working equipment, furniture, library materials.
- The following types of materials should not, in general, be stored on campus:
  - Chemicals or hazardous waste
  - Non-working equipment
  - Empty cardboard boxes, crates, computer boxes, packing materials, etc.
  - Individual office files or other individual office items (personal furniture, books, etc.)
  - Materials belonging to emeritus faculty members
  - Non-usable office furniture (such furniture should be surpluses)
  - Personal property (bicycles, athletic equipment, clothing, luggage, etc.)
- It is advisable that storage assignments be made for a specified period of time, and that storage is culled on a regular basis.

### **4.3 Kitchen Space**

Like office service space, kitchen spaces that are developed for small work groups tend to become cramped and poorly organized spaces that are too close to individual work environments. Centralizing kitchens for shared use on each floor of buildings is a preferable way to organize these spaces. This also saves cost in terms of appliance purchase and use, and is more sustainable in terms of energy use.

Galley style kitchens tend to be space efficient and adequate for office settings. Eat-in kitchen areas require more space and should be centralized in buildings as much as possible. They also require careful monitoring to be sure that they are utilized and that clean-up occurs on a regular basis.

### **4.4 Project Rooms**

This is a room or group of rooms used by faculty and/or students to complete projects or assignments outside of a formal or regularly scheduled instructional facility such as a classroom or laboratory. These rooms are usually open and accessible at any time of the day for one or more persons to use to complete projects assigned during a class. These rooms are typically furnished with tables and chairs so that students may work in groups. Other equipment such as computers and printers may also be provided. These rooms have become an important part of the educational delivery system for several disciplines. Normally a room of approximately 250 ASF is allotted for faculty and students to work on projects relating to their academic discipline, but this module may vary by discipline. For some Departments this space is used as their research area.

#### **4.5 Media**

The space needs for Media space includes all non-exempt space classified under room types 530-Media and 535-Media Service. For Departments requiring this type of space a minimum of 1,500 ASF plus a space factor of 0.1 ASF / student credit hour is used. This space is usually assigned to Communication, Radio/TV, and Visual Arts Departments. For administrative units, such as printing services, or units not generating credit hours that are assigned Media space the space assigned is assumed to be sufficient and a need is not calculated, but may be adjusted based on an independent assessment and justification.

#### **4.6 Clinic**

The space needs for Clinic space includes all non-exempt space classified under room type's 540-Clinic and 545-Clinic Service. For Departments requiring this type of space such as psychology and speech & hearing, a minimum core of 1,000 ASF plus a factor of 0.1 ASF / student credit hour is used. For administrative units that are assigned Clinic space a need is not calculated, and the space assigned is assumed sufficient, but may be adjusted based on an independent assessment and justification.

#### **4.7 Demonstration**

The space needs for Demonstration space includes all non-exempt space classified under room types 550- Demonstration and 555-Demonstration Service. For Departments requiring this type of space such as education, consumer sciences, and culinary programs, a minimum core of 2,500 ASF plus a factor of 0.1 ASF / student credit hour is used. For administrative units that are assigned Demonstration space a need is not calculated, and the space assigned is assumed sufficient, but may be adjusted based on an independent assessment and justification.





## **4.8 Student Lounge**

Student lounge space includes areas used for rest and relaxation used primarily by students. This category does not include lounge space located in residence halls or offices.

The space needs for Lounge space includes all non-exempt space classified under room type's 650-Lounge and 655-Lounge Service. The calculation for Lounges is 2 ASF / Student FTE. Lounge space for faculty and staff is calculated under the Office category (300). Note: student lounge space assigned administrative support areas will be reviewed on a case by case basis and are not included in this formula- based assessment

### **Sources:**

The Classroom Space Guidelines data is based on a synthesis of space guidelines developed by the following:

Cornell University, "Space Planning Guidelines," Ithaca Campus, 1994. (The Cornell Report included reference data from: SUNY – State University of New York, WICHE – Western Interstate Commission for Higher Education, MIT – Massachusetts Institute of Technology.), Washington State ("Facilities Evaluation and Planning Guide (FEPG), October 1994), California "Postsecondary Education Commission" report (CPEC), "A Capacity for Learning," 1990.

U.S. Department of Education, National Center for Education Statistics. (2006). Postsecondary Education

Facilities Inventory and Classification Manual (FICM): 2006 Edition (NCES 2006-160). U.S. Department of Education. Washington, DC: National Center for Education Statistics