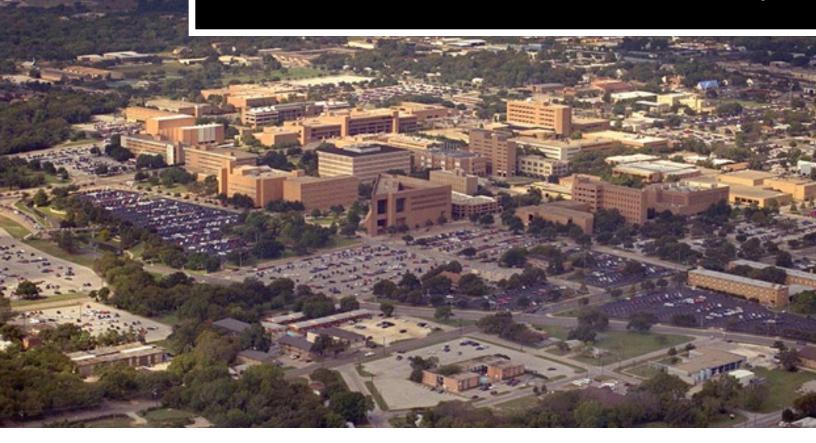


The University of Texas at Arlington Campus Design Guidelines (v. 1.0)

Final - June 2015





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**Facility Programming and Consulting** 

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## Introduction

F ACILITY PROGRAMMING AND CONSULTING WAS engaged by the University of Texas at Arlington to prepare Campus Design Guidelines. This document is intended to give the executive and departmental administration, facilities management staff, and the design team a "workbook" from which to begin the preliminary planning and design of new or renovated facilities on the UT Arlington campus. All diagrams and drawings contained herein are included as planning tools only and are not intended to dictate the final design or configuration of the space.

These guidelines are intended to be an integral part of the process which provides new or renovated space at UT Arlington. In the early planning stages when stakeholders are contemplating a new project, the guidelines will help give them a sense of scale and functionality for many of the spaces they wish to build or renovate. Then, as the project concept advances, UT Arlington Facilities Management will help clarify space sizes, assist in estimating gross square feet, and assist in deriving early project budgets. Finally, once the project is approved to move forward, the guidelines will be used by Facilities Management or outside consultants to develop programming and design documents.

This document will establish minimum design guidelines and planning metrics for specific room types, thereby creating a "tool kit" for preliminary planning, sizing, and cost estimating of both new construction and renovation of existing facilities. During the design process, this document will be utilized by the Office of Facilities Management in conjunction with the following published documents:

- UT Arlington Campus Master Plan Update and Design Guidelines 2005-2020
- UT Arlington OIT Specifications / Standards
- UT Arlington Campus Controlled Access Card Operations
- OFPC Owner's Design Guidelines (September, 1997; Revised November 6, 2003 to include UT System OFPC Security Planning and Design Guidelines)
- UT System OFPC Facilities Programming Guidelines (October 1995; Revised July 2005)

# What Types of Spaces Are Included?

The Campus Design Guidelines are intended to serve as a "living" document which will evolve over time, continually being refined, edited and added to, as required by the University. The focus of the document will be the core room type categories - classroom, laboratory, and office. The chart which follows outlines the topics, organized by room type categories developed by the Texas Higher Education Coordinating Board (THECB), which were considered for inclusion in this document. Those which are discussed in this document are indicated in the "Yes" column. In addition, areas which may be included at a future date are also indicated.

At the commencement of this project, UT Arlington determined that Health Care Facilities (800s) and Residential Facilities (900s) would not be considered for inclusion in the general Campus Design Guidelines.

Room Type / Category*	Yes	No	Consider for Future Phase
Classroom Facilities (110s)	General-Purpose Classrooms (Traditional and Technology Enhanced) Auditoriums and Lecture Halls		
Laboratory Facilities (200s)	Class Labs  Open Computer Labs Special Class Labs – ie. Engineering, Biology, Chemistry Select Fine Arts Spaces for Music and Performing Arts Research / Non-Class Labs (Basic and Specialty - ie. High Bay)	Non-Music or Performing Arts Fine Arts Spaces	
Office Facilities (300s)	Faculty, Staff and Grad Assistant Offices/Workstations (Administration and Department Only) Office Service (for Suites) – ie. Reception Areas, Workrooms, File Storage, Breakroom Conference/Meeting Rooms	"Benching" Stations for Faculty/Staff Security or Police Offices	Faculty Development and Training Student Organization Offices
Study Facilities (400s)		Library	
Special Use Facilities (500s)		Athletics Facilities	Student Health Clinic
General Use Facilities (600s)	Building Lobby  Collaborative Learning Areas Student Commons/Lounge - ie. Casual Laptop Areas Vending Machine / ATM Areas	Day Care  Beverage / Snack Kiosks	Food Facilties (Cafeteria / Dining)
Supporting Facilities (700s)		Central Storage Motor Pool Maintenance Shops Telecommunications (MDF) Telecommunications (IDF)	
Non-Assignable Areas	Public Restrooms (Mens, Womens, Unisex) Corridors, Stairs and Elevators Recycling/Trash Areas Custodial Closets Safe Room (Hardened Room)		

<sup>\*</sup>Note: Health Care Facilties (800s) and Residential Facilities (900s) will not be included in the Design Guidelines.

## **Terms and Definitions**

Listed below are terms and definitions frequently used in this document. In addition, many terms have been abbreviated and are identified as follows.

## **Abbreviations**

ADA	Americans with Disabilities Act
AFF	Above Finish Floor
ASF	Assignable Square Feet
CFCI	Contractor Furnished, Contractor Installed
GFCI	Ground Fault Circuit Interrupter
GSF	Gross Square Feet
HVAC	Heating, Ventilation and Air Conditioning
MAX / MIN	Maximum / Minimum
MEP	Mechanical, Electrical and Plumbing
NASF	Non-Assignable Square Feet
NO	Number
OFCI	Owner Furnished, Contractor Installed
OFOI	Owner Furnished, Owner Installed
OFPC	Office of Facilities Planning and Construction
QTY	Quantity
ТНЕСВ	Texas Higher Education Coordinating Board
VAR	Varies

# **Definitions**

**Assignable Square Feet** 

(ASF)

The usable area or area within the inside face of the interior walls of each space

**Gross Square Feet** (GSF)

The area within the outside face of the exterior walls of the building which includes assignable square feet, non-assignable square feet, building service area, circulation area, mechanical area, and structural area

Non-Assignable Square Feet (NASF) Areas such as mechanical space, telecommunication closets, janitor closets, etc., which are an inherent part of the building, but are not usable space for the owner's program activities (includes building service, circulation, and mechanical areas)

Structural Area

The sum of all areas on all floors that can not be occupied or put to use because of structural building features

**Technical Requirements** 

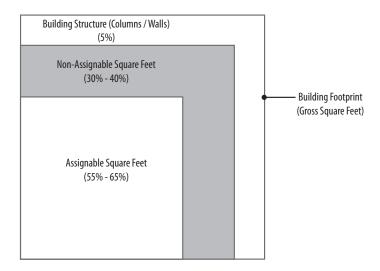
Mechanical, electrical, and plumbing (MEP) and other physical, technical, or building construction requirements

## **Assignable vs. Gross Square Feet**

The diagrams in this document depict area sizes in Assignable Square Feet (ASF) and non-assignable square feet (NASF) unless Gross Square Feet (GSF) is specifically noted. Only the usable area of a given space is included in ASF. It does not include spaces such as lobbies, corridors (except for internal circulation within suites) and other public and support spaces such as mechanical rooms, toilets, stairs, etc. These types of spaces are included in the NASF. The sum of the ASF, NASF and the structural areas is equal to the gross square footage of the building.

The distinction between ASF and GSF is an important one, as the ASF is an indicator of the usable area of a space, while the GSF indicates the overall size of the building or project, and is used to develop cost estimates.

In University facilities, the Texas Higher Education Coordinating Board (THECB) recommended ASF to GSF ratios range between 50% and 65%. A typical academic building consisting of classrooms and offices would use a 60% – 65% ASF/GSF ratio. For example, a new building with 10,000 ASF would convert to approximately 15,385 GSF at a 65% ASF/GSF ratio. Laboratory buildings require more MEP infrastructure, so that same 10,000 ASF would convert to approximately 20,000 GSF at 50% ASF/GSF ratio.



Gross Square Feet = Assignable Square Feet + Non-Assignable Square Feet + Building Structure

## **Internal Circulation**

In addition to stairwells, elevators, lobbies, and mechanical rooms, the assignable-to-gross factor for the building will include space for major building corridors which provide access to the major spaces in the facility. This space allocation does not include enough space for hallways and semi-public waiting or reception spaces which are often affiliated with functions organized in a suite arrangement (i.e. offices). The suites themselves are accessed from the major building corridors, while the spaces within the suite are accessed from "internal circulation."

## **Preliminary Building Planning Checklist**

When considering constructing a new facility, or renovating an existing building for a new purpose, it is important to consider what types of spaces will be required or desired in the facility. The checklist below outlines the types of spaces which may be included. Each of these spaces is also discussed in greater detail in this document.

Note: This checklist is intended as a brainstorming tool for preliminary planning and may not include all spaces which the proposed building or renovation may require.

ROOM TYPE/CATEGORY	SPACE	YES	NO
Classroom Facilities	Auditoriums		
	Lecture Halls		
	Medium Classrooms		
	Small Classrooms		
Teaching and Study Laboratory Facilities	Computer Labs		
	Physics Labs		
	Engineering Labs		
	Music Instruction		
	Black Box Theater		
	Biology Labs		
	Biology Prep Rooms		
	Chemistry Labs		
	Chemistry Prep Rooms		
Research / Non-Class Laboratory Facilities	Dry Research Labs		
	Wet Research Labs		
Office Facilities	Private Offices (Faculty, Administration, Staff)		
	Open Workstations (Faculty, Administration, Staff)		
	Reception Areas		
	Large Conference / Meeting Rooms		
	Small Conference / Meeting Rooms		
	Breakrooms		
	Workrooms		
	File and General Storage Rooms		
Building Common Spaces	Lobbies / Pre-Function Areas		
	Collaborative Learning Areas		
	Automated Services		
	Student Seating / Distributed Gathering Areas		
Non-Assignable Spaces	Safe Rooms		
	Custodial Closets		
	Telecommunications Closets (MDF/IDF)		
	Mechanical Rooms		
	Electrical Closets		
	Hallways / Corridors		
	Elevators		
	Restrooms (Mens, Womens, Unisex / Family)		
	Building Recycling and Trash Collection		
	Loading and Service		
	Exterior Spaces		

Executive	Summary
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## **Classroom Facilities**

## Introduction

Cassroom facilities, as defined by the Texas Higher Education Coordinating Board (THECB), are for scheduled instruction referred to as lecture rooms, lecture-demonstration rooms, seminar rooms, and general-purpose classrooms. Classrooms can be equipped with tablet armchairs, tables and chairs (as in a seminar room), or similar types of seating. They also can be furnished with special equipment, including multimedia or telecommunications equipment, appropriate to a specific area of study if the room is suitable for use by other classes.

The following types of classroom facilities are included in this section:

- Auditoriums (capacity: 200+)
- Lecture Halls (capacity: 90+)
  - □ Fixed Seating (capacity: 140 to 200+)
  - University Style Seating (capacity: 93 to 132+)
- Medium Classrooms (capacity: 40 to 92)
- Small Classrooms (capacity: less than 50)

## **Classroom Facilities** • Auditoriums

## AUDITORIUMS

### **GENERAL REQUIREMENTS**

## **Capacity and Size**

Room Size (min.) 5,000 ASF (250 seat capacity) ASF per Person (min.) 20 No. of Occupants 200 +

### Seating

- 1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.
- 2. Fixed tablet-arm seating to be utilized. Minimum seat width to be 22 inches; seating to be upholstered cushion. Seating should be staggered to allow adequate sight lines and visibility to the stage.
- 3. The use of intermediate aisles or center aisle design is preferred. Students shall not need to pass more than 10 people to reach an aisle.

## Technology, Instructional Aids and Equipment

- 1. The amount of special technology provided in each classroom will be dependent on budget.
- 2. At a minimum, room should include the standard technology package. Room should have at least one ceiling-mounted projector with projection screen or flat panel monitor(s) with data input. Type, size, and location(s) to be determined in conjunction with UT Arlington.
- 3. Room should have an instructor's station with technology and lighting controls.
- 4. Room shall have a sound system, voice amplification system, and assisted listening devices.

### **SAMPLE ROOM IMAGES**



Three components which distinguish an Auditorium space - ceiling, lighting and stage.



Fixed seating with tablet arms; 22 inch seat width (min.)

## **Classroom Facilities** • Auditoriums

	AUDITORIUMS
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Tiered Floor; Carpet  Provide raised stage area at a level above seating. Stage floor to be hardwood with protective finish.
Wall Finish	Acoustically Treated (as required)
	<ul> <li>Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space.</li> </ul>
Ceiling Finish	Acoustically Treated (as required)
	Ceiling height shall be proportional to the room scale.
Lighting	Non-Glare Fluorescent; LED
	Natural light is not required in this space. Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height; 20 fc required during projection. Provide special scene lighting at stage. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.
	Lighting controls shall be located within close proximity to all entry doors and be controllable from the instructor's station. Zone lighting in order to allow for proper viewing of projected images in a manner which allows for light fixtures at/near the projection screen(s) to remain off so as not to impede viewing of images on the screen. Lighting over instructor's station and first row to be switched separately. Stage lighting to be switched separately.
Doors / Entry	(2) 36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion. Actual size, number, and location of doors to be determined by Code based on number of occupants and floor area.</li> </ul>
Acoustics	<ul> <li>Room shall have a sound system, voice amplification system, and assisted listening devices. Special acoustical treatments should be applied on ceiling and wall surfaces, as required.</li> </ul>
Sight Lines	• View of stage, projection screen(s), whiteboard(s) and/or teaching area shall not be obstructed by building structural elements. Projection screen(s) should be located so as not to obstruct information written on the whiteboards.
Mechanical / Plumbing	
Special Venting	No
	Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.
	• An interior environment with a temperature of $73^{\circ}$ ( $\pm$ $2^{\circ}$ ) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.
Hot / Cold Water	No
Electrical / Communications	
Power	110V
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture. Consider the provision of power to seating for student connection of laptops and other electronic devices.</li> </ul>
Voice / Data	Yes; Wi-Fi
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> </ul>
	<ul> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.</li> <li>Building shall be equipped with wireless technology and infrastructure.</li> </ul>

## ADDITIONAL NOTES / REQUIREMENTS

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<sup>1.</sup> Provide Control Room (100 ASF) and A/V Storage Closet (100 ASF) accessible from this space.

## **Classroom Facilities** • Lecture Halls (Fixed Seating)

LECTURE HALLS (FIXED SEATING)					
GENERAL REQUIREMENTS					
Capacity and Size					
Room Size (min.)	2,250 ASF (150 seat capacity)	ASF per Person (min.)	15	No. of Occupants	140 - 200 +

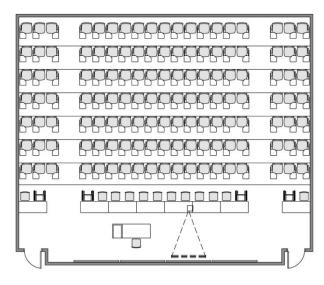
## Seating

- 1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.
- 2. Fixed tablet-arm seating to be utilized. Minimum seat width to be 22 inches; seating to be upholstered cushion. Seating should be staggered to allow adequate sight lines and visibility to the instructor / teaching area.

## Technology, Instructional Aids and Equipment

- 1. The amount of special technology provided in each classroom will be dependent on budget.
- 2. At a minimum, classroom should include the standard technology package. Classroom should have at least one ceiling-mounted projector with projection screen or flat panel monitor(s) with data input. Type, size, and location(s) to be determined in conjunction with UT Arlington.
- 3. Room should have an instructor's station (with technology/audio-visual controls), as well as whiteboard(s) or smart board(s).

### **SAMPLE ROOM IMAGES**





# **Classroom Facilities** • Lecture Halls (Fixed Seating)

	LECTURE HALLS (FIXED SEATING)
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Tiered Floor; Carpet
Wall Finish	Painted Gypsum Wallboard
	<ul> <li>Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space.</li> </ul>
Ceiling Finish	Painted Gypsum Wallboard; Acoustic Tile
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is preferred. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height; 20 fc required during projection. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.
	• Lighting controls shall be located within close proximity to all entry doors and the instructor's station. Zone lighting in order to allow for proper viewing of projected images in a manner which allows for light fixtures at/near the projection screen(s) to remain off so as not to impede viewing of images on the screen. Lighting over instructor's station and first row to be switched separately.
Doors / Entry	(2) 36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion. Actual size, number, and location of doors to be determined by Code based on number of occupants and floor area.</li> </ul>
Acoustics	Speech should be intelligible without amplification.
Sight Lines	<ul> <li>View of projection screen(s), whiteboard(s) and/or teaching area shall not be obstructed by building structural elements. Projection screen(s) should be located so as not to obstruct information written on the whiteboards.</li> </ul>
Mechanical / Plumbing	
Special Venting	No
Special venting	Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.
	<ul> <li>An interior environment with a temperature of 73° (± 2°) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.</li> </ul>
Hot / Cold Water	No
Electrical / Communications	/ Audio-Visual
Power	110V
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture.</li> </ul>
Voice / Data	Yes; Wi-Fi
10.00, 200	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> </ul>
	<ul> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.</li> <li>Building shall be equipped with wireless technology and infrastructure.</li> </ul>

## ADDITIONAL NOTES / REQUIREMENTS

<sup>1.</sup> Provide A/V Storage Closet (100 ASF) accessible from this space.

## **Classroom Facilities** • Lecture Halls (University Style Seating)

## LECTURE HALLS (UNIVERSITY STYLE SEATING)

### **GENERAL REQUIREMENTS**

### **Capacity and Size**

Room Size (min.) 2,000 ASF (100 seat capacity) ASF per Person (min.) 20 No. of Occupants 93 - 132 +

#### Seating

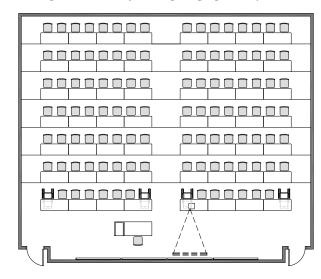
- 1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.
- 2. Utilize "university" style seating with fixed tables and attached seating. Rows may be organized in either a standard, linear configuration or in a semi-circular / arc configuration around the instructor's station. Minimum seat width to be 22 inches.

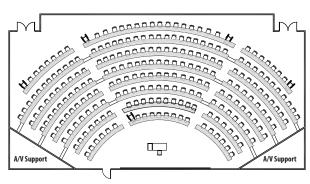
### **Technology, Instructional Aids and Equipment**

- 1. The amount of special technology provided in each classroom will be dependent on budget.
- 2. At a minimum, classroom should include the standard technology package. Classroom should have at least one ceiling-mounted projector with projection screen or flat panel monitor(s) with data input. Type, size, and location(s) to be determined in conjunction with UT Arlington.
- 3. Room should have an instructor's station (with technology/audio-visual controls), as well as whiteboard(s) or smart board(s).

### **SAMPLE ROOM IMAGES**

Examples included are for conceptual purposes only and are not intended to dictate the final design or configuration of the space.





Room may be organized with traditional linear configuration (top) or in a semi-circular / arc configuration.





Large lecture hall with tiered "university" seating facilitates student collaboration between rows.

# **Classroom Facilities** • Lecture Halls (University Style Seating)

	LECTURE HALLS (UNIVERSITY STYLE SEATING)
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Tiered Floor; Carpet
Wall Finish	Painted Gypsum Wallboard
	<ul> <li>Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space.</li> </ul>
Ceiling Finish	Painted Gypsum Wallboard; Acoustic Tile
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is preferred. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height; 20 fc required during projection. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.
	• Lighting controls shall be located within close proximity to all entry doors and the instructor's station. Zone lighting in order to allow for proper viewing of projected images in a manner which allows for light fixtures at/near the projection screen(s) to remain off so as not to impede viewing of images on the screen. Lighting over instructor's station and first row to be switched separately.
Doors / Entry	(2) 36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion. Actual size, number, and location of doors to be determined by Code based on number of occupants and floor area.</li> </ul>
Acoustics	<ul> <li>Speech should be intelligible without amplification.</li> </ul>
Sight Lines	• View of projection screen(s), whiteboard(s) and/or teaching area shall not be obstructed by building structural elements. Projection screen(s) should be located so as not to obstruct information written on the whiteboards.
Mechanical / Plumbing	
Special Venting	No
, ,	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> <li>An interior environment with a temperature of 73° (± 2°) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.</li> </ul>
Hot / Cold Water	No
Electrical / Communications	/ Audio-Visual
Power	110V
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture.</li> </ul>
Voice / Data	Yes: Wi-Fi
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> </ul>
	<ul> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.</li> <li>Building shall be equipped with wireless technology and infrastructure.</li> </ul>

## ADDITIONAL NOTES / REQUIREMENTS

<sup>1.</sup> Provide A/V Storage Closet (100 ASF) accessible from this space.

## **Classroom Facilities** • Medium Classrooms

## MEDIUM CLASSROOMS

#### **GENERAL REQUIREMENTS**

### **Capacity and Size**

Room Size (min.) - Flexible Seating	800 ASF (40 seat capacity)	ASF per Person (min.)	20	No. of Occupants	40-69
Room Size (min.) - Fixed Tables/Chairs	1,500 ASF (60 seat capacity)	ASF per Person (min.)	25	No. of Occupants	53-92

## Seating

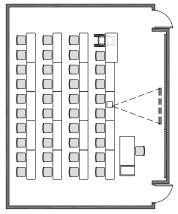
- 1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.
- 2. Utilize flexible seating, with movable tables and chairs on a flat floor (adaptive teaching space), or "university" style seating, with fixed tables and attached seating, in a tiered floor arrangement. Minimum seat width to be 22 inches. Consider multi-directional or traditional lecture orientation when configuring the layout of this space, based on User preference and curriculum requirements.

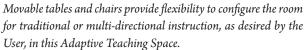
## Technology, Instructional Aids and Equipment

- 1. The amount of special technology provided in each classroom will be dependent on budget.
- 2. At a minimum, classroom should include the standard technology package. Classroom should have at least one ceiling-mounted projector with projection screen or flat panel monitor(s) with data input. Type, size, and location(s) to be determined in conjunction with UT Arlington.
- 3. Room should have an instructor's station (with technology/audio-visual controls), as well as whiteboard(s) or smart board(s).

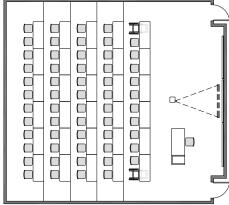
#### **SAMPLE ROOM IMAGES**











A fixed "university" style seating arrangement may be considered in rooms with a tiered floor and more than 50 occupants.

## **Classroom Facilities** • Medium Classrooms

	MEDIUM CLASSROOMS
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Flat Floor; Carpet
Wall Finish	Painted Gypsum Wallboard
	<ul> <li>Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space.</li> </ul>
Ceiling Finish	Painted Gypsum Wallboard; Acoustic Tile
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is preferred. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height; 20 fc required during projection. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	• Lighting controls shall be located within close proximity to all entry doors and the instructor's station. Zone lighting in order to allow for proper viewing of projected images in a manner which allows for light fixtures at/near the projection screen(s) to remain off so as not to impede viewing of images on the screen. Lighting over instructor's station and first row to be switched separately.
Doors / Entry	(2) 36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion. Actual size, number, and location of doors to be determined by Code based on number of occupants and floor area.</li> </ul>
Acoustics	<ul> <li>Speech should be intelligible without amplification.</li> </ul>
Sight Lines	• View of projection screen(s), whiteboard(s) and/or teaching area shall not be obstructed by building structural elements. Projection screen(s) should be located so as not to obstruct information written on the whiteboards.
Mechanical / Plumbing	
Special Venting	No
, ,	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>
	An interior environment with a temperature of $73^0$ ( $\pm 2^0$ ) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.
Hot / Cold Water	No
Electrical / Communications	s / Audio-Visual
Power	110V
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture.</li> </ul>
Voice / Data	Yes; Wi-Fi
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> </ul>
	<ul> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.</li> <li>Building shall be equipped with wireless technology and infrastructure.</li> </ul>

## ADDITIONAL NOTES / REQUIREMENTS

1. Consider locating A/V Storage Closet (80 ASF) accessible from this space.

## **Classroom Facilities • Small Classrooms**

SMALL CLASSROOMS					
GENERAL REQUIREMENTS	GENERAL REQUIREMENTS				
Capacity and Size					
Room Size (min.) - Flexible Seating	900 ASF (30 seat capacity)	ASF per Person (min.)	30	No. of Occupants	24-39
Room Size (min.) - Fixed Tables/Chairs	750 ASF (30 seat capacity)	ASF per Person (min.)	25	No. of Occupants	26-52

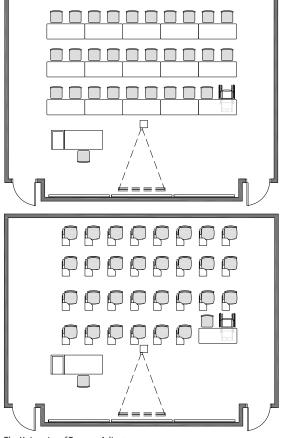
## Seating

- 1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.
- 2. Utilize flexible seating, with movable tables and chairs, or "university" style seating, with fixed tables and attached seating. Minimum seat width to be 22 inches. Consider multi-directional or traditional lecture orientation when configuring the layout of this space, based on User preference and curriculum requirements. Consider use of tablet arm chairs (standard or on wheels) for even greater flexibility in classroom configuration.

### **Technology, Instructional Aids and Equipment**

- 1. The amount of special technology provided in each classroom will be dependent on budget.
- 2. At a minimum, classroom should include the standard technology package. Classroom should have at least one ceiling-mounted projector with projection screen or flat panel monitor(s) with data input. Type, size, and location(s) to be determined in conjunction with UT Arlington.
- 3. Room should have an instructor's station (with technology/audio-visual controls), as well as whiteboard(s) or smart board(s).

## **SAMPLE ROOM IMAGES**





Furniture choice provides flexibility to configure the room for traditional or multi-directional instruction, as desired by the User.

# **Classroom Facilities** • Small Classrooms

PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Flat Floor; Carpet
Wall Finish	Painted Gypsum Wallboard
	Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space.
Ceiling Finish	Painted Gypsum Wallboard; Acoustic Tile
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is preferred. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height; 20 fc required during projection. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	• Lighting controls shall be located within close proximity to all entry doors and the instructor's station. Zone lighting in order to allow for proper viewing of projected images in a manner which allows for light fixtures at/near the projection screen(s) to remain off so as not to impede viewing of images on the screen. Lighting over instructor's station and first row to be switched separately.
Doors / Entry	36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> <li>Locate doors within space to minimize congestion. Actual size, number, and location of doors to be determined by Code based on number of occupants and floor area.</li> </ul>
Acoustics	<ul> <li>Speech should be intelligible without amplification.</li> </ul>
Sight Lines	<ul> <li>View of projection screen(s), whiteboard(s) and/or teaching area shall not be obstructed by building structural elements. Projection screen(s) should be located so as not to obstruct information written on the whiteboards.</li> </ul>
Mechanical / Plumbing	
Special Venting	No
. 3	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> <li>An interior environment with a temperature of 73° (± 2°) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.</li> </ul>
Hot / Cold Water	No
Electrical / Communications	/ Audio-Visual
Power	110V
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture.</li> </ul>
Voice / Data	Yes; Wi-Fi
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> </ul>
	<ul> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.</li> <li>Building shall be equipped with wireless technology and infrastructure.</li> </ul>

# **Classroom Facilities**

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## **Teaching and Study Laboratories**

## Introduction

A S DEFINED BY THE TEXAS Higher Education Coordinating Board (THECB), Laboratory Facilities are rooms designed with "built-in" laboratory equipment such as laboratory benches, specialized equipment, or special utilities (gas, water, etc.). They have been organized in two general categories and will each be provided their own section in this document:

- Teaching and Study Laboratories
- Research/Non-Class Laboratories

All Teaching Labs require special equipment for student participation, experimentation, observation, or practice. They are designed for and / or furnished with equipment to serve the needs of a particular discipline. The room's design and/or equipment normally limits its use for other disciplines. Included are science laboratories, instructional shops, typing laboratories, computer laboratories, drafting rooms, band rooms, darkrooms in the discipline of photography, choral rooms, group studios, and similar specially designed and/or equipped rooms.

The differences between the various teaching labs are based on the following:

- Class Labs are used for regularly scheduled group instruction classes with an instructor present
- Special Class Labs are for informally or irregularly scheduled classes with an instructor present and are often referred to as "Open Labs"
- Individual Study Labs are primarily for individual student experimentation, observation, or practice without an instructor present

The following types of Teaching Labs are included in this section:

- Dry Teaching Labs
  - Computer Labs
  - Physics Labs
  - Engineering Class Labs
  - Music Instruction (Band, Orchestra, Choir, etc.)
  - Black Box Theater
- Wet Teaching Labs
  - Biology Labs and Prep Rooms
  - Chemistry Labs and Prep Rooms

Note: Due to the special nature of Fine Arts and Performing Arts Spaces, the guidelines for these areas will be developed at a later date.

## **Teaching and Study Laboratories • Computer Labs**

# COMPUTER LABS GENERAL REQUIREMENTS Capacity and Size Room Size (min.) 1,250 ASF (24 students) ASF per Person (min.) 50 No. of Occupants 25

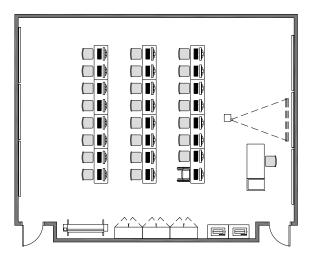
## Seating

- 1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.
- 2. Utilize flexible seating with movable tables and chairs. Minimum seat width to be 22 inches.
- 3. This space may be utilized for classroom instruction or as a general, open computer lab for student use when not scheduled.

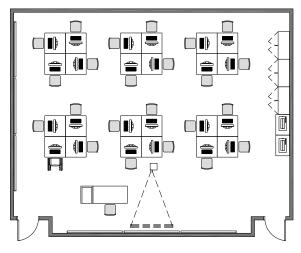
## Technology, Instructional Aids and Equipment

- 1. The amount of special technology provided in each laboratory will be dependent on budget.
- 2. At a minimum, computer lab should include the standard technology package. Laboratory should have at least one ceiling-mounted projector with projection screen or flat panel monitor(s) with data input. Type, size, and location(s) to be determined in conjunction with UT Arlington.
- 3. Room should have an instructor's station (with technology/audio-visual controls), as well as whiteboard(s) or smart board(s). Resident PC connections to be installed.

### **SAMPLE ROOM IMAGES**









# **Teaching and Study Laboratories • Computer Labs**

PHYSICAL ENVIRONMENT	COMPUTER LAI
rchitectural	
Floor Finish	Carpet
Wall Finish	Painted Gypsum Wallboard
van inisi	<ul> <li>Wall construction should minimize sound transmission. Walls shall extend to underside of the rodeck or floor above or be specially attenuated to limit noise intrusion to/from this space.</li> </ul>
Ceiling Finish	Acoustic Tile System
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is not required. Where applicable, windows shall be provided with blinds or shades control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required desk height; 20 fc required during projection. LED lighting is under evaluation at UT Arlington Consult Facilities Management for possible inclusion.</li> </ul>
	Lighting controls shall be located within close proximity to all entry doors and the instructor's s tion. Zone lighting in order to allow for proper viewing of projected images in a manner which allow for light fixtures at/near the projection screen(s) to remain off so as not to impede viewing of imag on the screen. Lighting over instructor's station and first row to be switched separately.
Doors / Entry	36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion. Actual size, number, and location of doors to be determined by Code based on number of occupants and floor area.</li> </ul>
Acoustics	<ul> <li>Speech should be intelligible without amplification.</li> </ul>
Sight Lines	<ul> <li>View of projection screen(s), whiteboard(s) and/or teaching area shall not be obstructed by buildin structural elements. Projection screen(s) should be located so as not to obstruct information writtee on the whiteboards.</li> </ul>
Mechanical / Plumbing	
Special Venting	No
	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Coo</li> </ul>
	■ This space will contain a large number of heat-producing computer workstations. An interior en ronment with a temperature of $73^0$ ( $\pm$ $2^0$ ) Fahrenheit is desired. Design HVAC system accordingly achieve this temperature.
Hot / Cold Water	No
lectrical / Communications	
Power	110V
	<ul> <li>Provide power to tables for desktop computer connection and other computer related equipment (printers, scanners, etc.). Power poles should be avoided to the greatest extent possible.</li> </ul>
Voice / Data	Yes; Wi-Fi
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology page to be provided in this space.</li> </ul>
	<ul> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Departments.</li> <li>Building shall be equipped with wireless technology and infrastructure.</li> </ul>

ADDITIONAL NOTES / REQUIREMENTS

## **Teaching and Study Laboratories • Physics Labs**

# GENERAL REQUIREMENTS Capacity and Size Room Size (min.) 1,000 ASF (24 students) ASF per Person (min.) 40 No. of Occupants 25

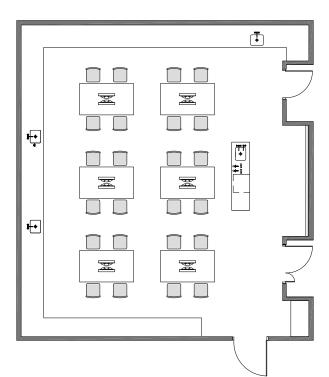
## Seating

1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

## Technology, Instructional Aids and Equipment

- 1. The amount of special technology provided in each laboratory will be dependent on budget.
- 2. At a minimum, teaching lab should include the standard technology package. Laboratory should have at least one ceiling-mounted projector with projection screen or flat panel monitor(s) with data input. Type, size, and location(s) to be determined in conjunction with UT Arlington.
- 3. Room should have an instructor's station (with technology/audio-visual controls), as well as whiteboard(s) or smart board(s).

## **SAMPLE ROOM IMAGES**





# **Teaching and Study Laboratories** • Physics Labs

	PHYSICS LABS
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Resilient Flooring
Wall Finish	Painted Gypsum Wallboard
	<ul> <li>Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space.</li> </ul>
Ceiling Finish	Acoustic Tile System
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
	<ul> <li>Due to nature of studies in this space, consideration may be given to an increased ceiling height and clear path for experiments studying trajectory, gravity/force mechanics, etc.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is not required. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height; 20 fc required during projection. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.
	• Lighting controls shall be located within close proximity to all entry doors and the instructor's station. Zone lighting in order to allow for proper viewing of projected images in a manner which allows for light fixtures at/near the projection screen(s) to remain off so as not to impede viewing of images on the screen. Lighting over instructor's station and first row to be switched separately.
Doors / Entry	36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion. Actual size, number, and location of doors to be determined by Code based on number of occupants and floor area.</li> </ul>
	<ul> <li>Consider use of oversized door or door with operable leaf to facilitate movement of equipment and furniture</li> </ul>
Acoustics	<ul> <li>Speech should be intelligible without amplification.</li> </ul>
Sight Lines	• View of projection screen(s), whiteboard(s) and/or teaching area shall not be obstructed by building structural elements. Projection screen(s) should be located so as not to obstruct information written on the whiteboards.
Mechanical / Plumbing	
Special Venting	No
	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>
	An interior environment with a temperature of 73° (± 2°) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.
	• If chemical fume hoods are to be located in this space, design HVAC accordingly to accommodate. Utilize variable air volume (VAV) systems. Hoods to be provided with alarm monitored by central EMS.
Hot / Cold Water	Optional (coordinate with User)
	<ul> <li>Provide plumbing for hot and cold water (with vacuum breaker) to sinks at room perimeter and at teaching station.</li> </ul>
Other	Piped Services
	<ul> <li>Piped services (air, gas, vacuum, etc.) may be desired in this lab. Design space accordingly to accommodate piped services to student and teaching stations, as required.</li> </ul>

## **Teaching and Study Laboratories • Physics Labs**

## PHYSICS LABS

#### **Electrical / Communications / Audio-Visual**

Power

110V; 208V

- Provide power to benches for student connection of laptops and other equipment.
- Standby power may be required for some equipment.
- Equipment utilized in this space may require higher voltage for operation. Verify equipment power requirements with manufacturer specifications.

Voice / Data

Yes; Wi-Fi

- Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.
- All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.
   Building shall be equipped with wireless technology and infrastructure.

## **ADDITIONAL NOTES / REQUIREMENTS**

- 1. Casework to be professional quality suitable for the type of science conducted in this space.
- 2. Labs which utilize hoods to be provided with alarm monitored by central EMS.
- 3. Labs should also utilize modular furniture, casework, and equipment, to the greatest extent possible, with fixed benches/fixtures only where necessary, such as at sink or other plumbing locations.
- 4. Furniture selections to be coordinated with built-in and modular casework, equipment, and other room utilities, as requested by User.

## **Teaching and Study Laboratories** • Engineering Labs

				ENC	GINEERING LABS
GENERAL REQUIREMENTS					
Capacity and Size					
Room Size (min.)	1,000 ASF (24 students)	ASF per Person (min.)	40	No. of Occupants	25

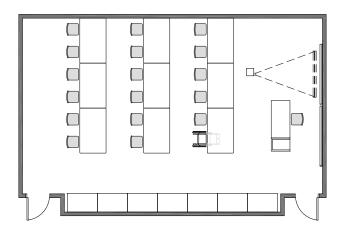
## Seating

1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

## Technology, Instructional Aids and Equipment

- 1. The amount of special technology provided in each laboratory will be dependent on budget.
- 2. At a minimum, teaching lab should include the standard technology package. Laboratory should have at least one ceiling-mounted projector with projection screen or flat panel monitor(s) with data input. Type, size, and location(s) to be determined in conjunction with UT Arlington.
- 3. Room should have an instructor's station (with technology/audio-visual controls), as well as whiteboard(s) or smart board(s).

## **SAMPLE ROOM IMAGES**





# **Teaching and Study Laboratories • Engineering Labs**

ENGINEERING LABS	
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Resilient Flooring
Wall Finish	Painted Gypsum Wallboard
	Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space.
Ceiling Finish	Acoustic Tile System
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is not required. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height; 20 fc required during projection. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	• Lighting controls shall be located within close proximity to all entry doors and the instructor's station. Zone lighting in order to allow for proper viewing of projected images in a manner which allows for light fixtures at/near the projection screen(s) to remain off so as not to impede viewing of images on the screen. Lighting over instructor's station and first row to be switched separately.
Doors / Entry	36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion. Actual size, number, and location of doors to be determined by Code based on number of occupants and floor area.</li> </ul>
	<ul> <li>Consider use of oversized door or door with operable leaf to facilitate movement of equipment and furniture</li> </ul>
Acoustics	<ul> <li>Speech should be intelligible without amplification.</li> </ul>
Sight Lines	• View of projection screen(s), whiteboard(s) and/or teaching area shall not be obstructed by building structural elements. Projection screen(s) should be located so as not to obstruct information written on the whiteboards.
Mechanical / Plumbing	
Special Venting	No
	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>
	• An interior environment with a temperature of $73^{0}$ ( $\pm$ $2^{0}$ ) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.
	<ul> <li>If chemical fume hoods are to be located in this space, design HVAC accordingly to accommodate. Utilize variable air volume (VAV) systems. Hoods to be provided with alarm monitored by central EMS.</li> </ul>
Hot / Cold Water	Optional (coordinate with User)
	<ul> <li>Provide plumbing for hot and cold water (with vacuum breaker) to sinks at room perimeter and at teaching station.</li> </ul>

## **Teaching and Study Laboratories • Engineering Labs**

## **ENGINEERING LABS**

#### **Electrical / Communications / Audio-Visual**

#### Power

110V; 208V

- Due to nature of studies in this space, consideration may be given to the need for increased electrical load capacity.
- Provide power to benches for student connection of laptops and other equipment.
- Standby power may be required for some equipment.
- Equipment utilized in this space may require higher voltage for operation. Verify equipment power requirements with manufacturer specifications.

## Voice / Data

## Yes; Wi-Fi

- Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.
- All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.
   Building shall be equipped with wireless technology and infrastructure.

### **ADDITIONAL NOTES / REQUIREMENTS**

- 1. Casework to be professional quality suitable for the type of science conducted in this space.
- 2. Labs which utilize hoods to be provided with alarm monitored by central EMS.
- 3. Labs should also utilize modular furniture, casework, and equipment, to the greatest extent possible, with fixed benches/fixtures only where necessary, such as at sink or other plumbing locations.
- 4. Furniture selections to be coordinated with built-in and modular casework, equipment, and other room utilities, as requested by User.

## **Teaching and Study Laboratories • Music Instruction**

# MUSIC INSTRUCTION (BAND, ORCHESTRA, CHOIR) GENERAL REQUIREMENTS Capacity and Size Room Size (min.) See "Additional Notes" ASF per Person (min.) 25 No. of Occupants Varies

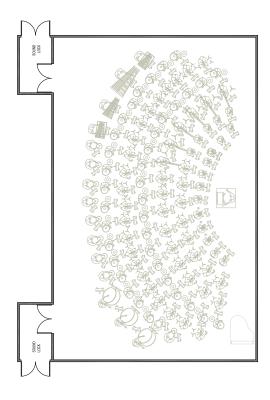
### Seating

- 1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.
- 2. Utilize flexible seating with movable chairs, as required per User preference and curriculum requirements. Minimum seat width to be 22 inches.

## Technology, Instructional Aids and Equipment

- 1. The amount of special technology provided in each laboratory will be dependent on budget.
- 2. At a minimum, teaching lab should include the standard technology package. Laboratory should have at least one ceiling-mounted projector with projection screen or flat panel monitor(s) with data input. Type, size, and location(s) to be determined in conjunction with UT Arlington.
- ${\it 3.} \quad \hbox{Room should have an instructor's station (with technology/audio-visual controls), as well as whiteboard(s) or smart board(s).}$

### **SAMPLE ROOM IMAGES**





# **Teaching and Study Laboratories • Music Instruction**

	MUSIC INSTRUCTION (BAND, ORCHESTRA, CHOIR)
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Sound Dampening; Movable Risers
Wall Finish	Sound Dampening
	<ul> <li>Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space.</li> </ul>
Ceiling Finish	Sound Dampening
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is not required. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height; 20 fc required during projection. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.
	Lighting controls shall be located within close proximity to all entry doors and the instructor's station. Zone lighting in order to allow for proper viewing of projected images in a manner which allows for light fixtures at/near the projection screen(s) to remain off so as not to impede viewing of images on the screen. Lighting over instructor's station and first row to be switched separately.
Doors / Entry	36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion. Actual size, number, and location of doors to be determined by Code based on number of occupants and floor area.</li> </ul>
	Consider use of oversized door or door with operable leaf to facilitate movement of instruments, equipment, and furniture
Acoustics	<ul> <li>Speech should be intelligible without amplification.</li> </ul>
	<ul> <li>Provide acoustic treatment to the wall and floor surfaces to ensure that sound produced within this space is not transmitted to adjacent spaces. Sound dampening treatments should not, however, disrupt the audibility within the space.</li> </ul>
Sight Lines	• View of projection screen(s), whiteboard(s) and/or teaching area shall not be obstructed by building structural elements. Projection screen(s) should be located so as not to obstruct information written on the whiteboards.
Mechanical / Plumbing	
Special Venting	No
	• Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.
	An interior environment with a temperature of $73^0$ ( $\pm$ $2^0$ ) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.
Hot / Cold Water	No

## **Teaching and Study Laboratories • Music Instruction**

## MUSIC INSTRUCTION (BAND, ORCHESTRA, CHOIR)

### **Electrical / Communications / Audio-Visual**

Power 110

When locating power outlets, pay special attention to the location of equipment and furniture.

Voice / Data Yes; Wi-l

- Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.
- All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.
   Building shall be equipped with wireless technology and infrastructure.

### **ADDITIONAL NOTES / REQUIREMENTS**

1. Room size will be dependent on the type of music instruction to occur within it. At a minimum, provide 25 ASF per person to allow for circulation around seated individuals and instruments, as required.

## **Teaching and Study Laboratories** • Black Box Theater

				BLA	ACK BOX THEATER
GENERAL REQUIREMENTS					
Capacity and Size					
Room Size (min.)	1,500 ASF (50 seat capacity)	ASF per Person (min.)	30	No. of Occupants	50

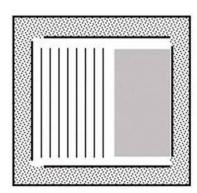
#### Seating

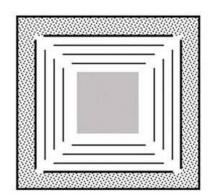
- 1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.
- 2. Space should be configured to allow for multiple stage / seating options. Utilize flexible seating with movable chairs, as required per User preference and curriculum requirements. Minimum seat width to be 22 inches. Consider the use of movable platforms for tiered seating.

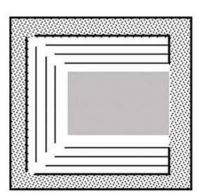
#### Technology, Instructional Aids and Equipment

1. Due to the special nature of this space, coordinate technology, instructional aids, and equipment required in this space with User.

#### **SAMPLE ROOM IMAGES**







 $Typical\ stage\ and\ seating\ configurations\ of\ a\ Blackbox\ Theater.$ 



# **Teaching and Study Laboratories •** Black Box Theater

BLACK BOX THEATER	
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Resilient Flooring
	<ul> <li>Provide clear floor area which allows for multiple stage and seating configurations. Finish to be black or other dark color, as preferred by User.</li> </ul>
Wall Finish	Painted Gypsum Wallboard
	Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space. Finish to be black or other dark color, as preferred by User.
Ceiling Finish	Exposed Structure
	<ul> <li>Ceiling height shall be proportional to the room scale. Exposed surfaces and conduit to be painted black or other dark color, as preferred by User.</li> </ul>
	<ul> <li>Provide adequate structure to support ceiling-mounted / suspended stage lighting and audio equipment.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is not required in this space. Provide fluorescent light for general overhead lighting. Min.</li> <li>80 to 100 footcandle (fc) required. Provide special scene lighting at stage. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	<ul> <li>Lighting controls shall be located within close proximity to all entry doors. Provide separate lighting controls for stage / theatrical lighting.</li> </ul>
Doors / Entry	(2) 36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> <li>Locate doors within space to minimize congestion. Actual size, number, and location of doors to be determined by Code based on number of occupants and floor area.</li> </ul>
Acoustics	<ul> <li>Room shall have a sound system. Special acoustical treatments should be applied on ceiling and wall surfaces, as required.</li> </ul>
Sight Lines	<ul> <li>View of stage / teaching area shall not be obstructed by building structural elements.</li> </ul>
Mechanical / Plumbing	
Special Venting	No
.,	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>
	<ul> <li>An interior environment with a temperature of 73° (± 2°) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.</li> </ul>
Hot / Cold Water	No
Electrical / Communications	/ Audio-Visual
Power	110V
	When locating power outlets, pay special attention to the location of equipment and furniture. Provide outlets at ceiling to support suspended stage lighting.
Voice / Data	Yes; Wi-Fi
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> </ul>
	<ul> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.</li> <li>Building shall be equipped with wireless technology and infrastructure.</li> </ul>

# Teaching and Study Laboratories

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## **Teaching and Study Laboratories** • Biology Labs

# GENERAL REQUIREMENTS Capacity and Size Room Size (min.) 1,000 ASF (24 students) ASF per Person (min.) 40 No. of Occupants 25

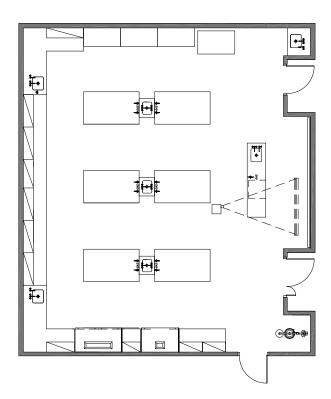
#### Seating

- 1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.
- 2. Bench configuration, rather than pod configuration, is preferred. Casework to be professional quality suitable for the type of science conducted in this space.

#### Technology, Instructional Aids and Equipment

- 1. The amount of special technology provided in each laboratory will be dependent on budget and user preference.
- 2. At a minimum, teaching lab should include the standard technology package. Laboratory should have at least one ceiling-mounted projector with projection screen or flat panel monitor(s) with data input. Type, size, and location(s) to be determined in conjunction with UT Arlington.
- 3. Room should have an instructor's station (with technology/audio-visual controls), as well as whiteboard(s) or smart board(s).

#### **SAMPLE ROOM IMAGES**







# **Teaching and Study Laboratories** • Biology Labs

	BIOLOGY LABS
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Resilient Flooring, VCT or Sealed Concrete
Wall Finish	Painted Gypsum Wallboard
	<ul> <li>Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space.</li> </ul>
Ceiling Finish	Acoustic Tile System
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is not required. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height; 20 fc required during projection. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	• Lighting controls shall be located within close proximity to all entry doors and the instructor's station. Zone lighting in order to allow for proper viewing of projected images in a manner which allows for light fixtures at/near the projection screen(s) to remain off so as not to impede viewing of images on the screen. Lighting over instructor's station and first row to be switched separately.
Doors / Entry	36" x 84" (min.); Controlled Access (ie. key card)
,	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion. Actual size, number, and location of doors to be determined by Code based on number of occupants and floor area.</li> </ul>
	<ul> <li>Consider use of oversized door or door with operable leaf to facilitate movement of equipment and furniture</li> </ul>
Acoustics	<ul> <li>Speech should be intelligible without amplification.</li> </ul>
Sight Lines	• View of projection screen(s), whiteboard(s) and/or teaching area shall not be obstructed by building structural elements. Projection screen(s) should be located so as not to obstruct information written on the whiteboards.
Mechanical / Plumbing	
Special Venting	No
	• Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.
	• An interior environment with a temperature of $73^{\circ}$ ( $\pm$ $2^{\circ}$ ) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.
	<ul> <li>If chemical fume hoods are to be located in this space, design HVAC accordingly to accommodate. Utilize variable air volume (VAV) systems. Hoods to be provided with alarm monitored by central EMS.</li> </ul>
Hot / Cold Water	Yes
	<ul> <li>Provide plumbing for hot and cold water (with vacuum breaker) to sinks at room perimeter and at teaching station.</li> </ul>
	<ul> <li>Safety station with integrated eyewash preferred to eyewash on sink.</li> </ul>
Other	Piped Services
	Piped services (air, gas, vacuum, etc.) may be desired in this lab. Design space accordingly to accom-
	modate piped services to student and teaching stations, as required.
	<ul> <li>All chemical storage cabinets are to be vented.</li> </ul>

## **Teaching and Study Laboratories** • Biology Labs

#### **BIOLOGY LABS**

#### **Electrical / Communications / Audio-Visual**

Power

110V; 208V

- Provide power to benches for student connection of laptops and other equipment.
- Standby power may be required for some equipment.
- Equipment utilized in this space may require higher voltage for operation. Verify equipment power requirements with manufacturer specifications.

Voice / Data

Yes; Wi-Fi

- Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.
- All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.
   Building shall be equipped with wireless technology and infrastructure.

- 1. EH&S is responsible for exiting requirements of larger lab spaces.
- 2. Consider locating Biology Prep Room adjacent to and accessible from this space. Prep room may be designed to be shared between two instructional labs.
- 3. Casework to be professional quality suitable for the type of science conducted in this space.
- 4. Labs which utilize hoods to be provided with alarm monitored by central EMS.
- 5. Labs should also utilize modular furniture, casework, and equipment, to the greatest extent possible, with fixed benches/fixtures only where necessary, such as at sink or other plumbing locations.
- 6. Furniture selections to be coordinated with built-in and modular casework, equipment, and other room utilities, as requested by User.

## **Teaching and Study Laboratories** • Biology Prep Rooms

				BIOL	OGY PREP ROOMS
GENERAL REQUIREMENTS					
Capacity and Size					
Room Size (min.)	300 ASF	ASF per Person (min.)	N/A	No. of Occupants	N/A

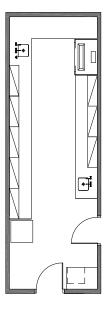
#### Seating

1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

#### Technology, Instructional Aids and Equipment

• Not applicable.

#### **SAMPLE ROOM IMAGES**





# **Teaching and Study Laboratories • Biology Prep Rooms**

BIOLOGY PREP ROOMS	
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Resilient Flooring, VCT or Sealed Concrete
Wall Finish	Painted Gypsum Wallboard
	Wall construction should minimize sound transmission.
Ceiling Finish	Acoustic Tile System
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is not required. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	<ul> <li>Lighting controls shall be located within close proximity to all entry doors.</li> </ul>
Doors / Entry	36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion.</li> </ul>
	<ul> <li>Consider use of oversized door or door with operable leaf to facilitate movement of equipment and furniture.</li> </ul>
Acoustics	Not Applicable
Sight Lines	Not Applicable
Mechanical / Plumbing	
Special Venting	No
	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>
	■ An interior environment with a temperature of 73° (± 2°) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.
	<ul> <li>If chemical fume hoods are to be located in this space, design HVAC accordingly to accommodate. Utilize variable air volume (VAV) systems. Hoods to be provided with alarm monitored by central EMS.</li> </ul>
Hot / Cold Water	Yes
	<ul> <li>Provide plumbing for hot and cold water (with vacuum breaker) to sinks at room perimeter.</li> </ul>
	<ul> <li>Safety station with integrated eyewash preferred to eyewash on sink.</li> </ul>
Other	Piped Services
	<ul> <li>Piped services (air, gas, vacuum, etc.) may be desired in this space. Design space accordingly to accommodate piped services to benchtop, as required.</li> </ul>

## **Teaching and Study Laboratories** • Biology Prep Rooms

**BIOLOGY PREP ROOMS** 

#### **Electrical / Communications / Audio-Visual**

Power

110V; 208V

- Provide power to benches for connection of desktop computers, laptops, and other equipment.
- Standby power may be required for some equipment.
- Equipment utilized in this space may require higher voltage for operation. Verify equipment power requirements with manufacturer specifications.

Voice / Data

Yes; Wi-Fi

- Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.
- All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.
   Building shall be equipped with wireless technology and infrastructure.

- 1. Biology Prep Rooms will provide storage and prep area for organic specimens utilized in course instruction. Casework to be professional quality suitable for the type of materials stored in this space. Modular casework may be utilized in lieu of built-in casework in some instances.
- 2. Consider locating Biology Prep Room adjacent to and accessible from Biology Lab. Prep room may be designed to be shared between two instructional labs.
- 3. Furniture selections to be coordinated with built-in and modular casework, equipment, and other room utilities, as requested by User.

## **Teaching and Study Laboratories • Chemistry Labs**

# CHEMISTRY LABS GENERAL REQUIREMENTS Capacity and Size Room Size (min.) 1,000 ASF (24 students) ASF per Person (min.) 40 No. of Occupants 25

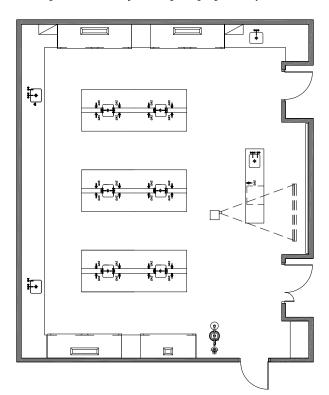
#### Seating

- 1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.
- 2. Bench configuration, rather than pod configuration, is preferred. Casework to be professional quality suitable for the type of science conducted in this space.

#### Technology, Instructional Aids and Equipment

- 1. The amount of special technology provided in each laboratory will be dependent on budget and user preference.
- 2. At a minimum, teaching lab should include the standard technology package. Laboratory should have at least one ceiling-mounted projector with projection screen or flat panel monitor(s) with data input. Type, size, and location(s) to be determined in conjunction with UT Arlington.
- 3. Room should have an instructor's station (with technology/audio-visual controls), as well as whiteboard(s) or smart board(s).

#### **SAMPLE ROOM IMAGES**





# **Teaching and Study Laboratories • Chemistry Labs**

	CHEMISTRY LABS
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Resilient Flooring, VCT, or Sealed Concrete
Wall Finish	Painted Gypsum Wallboard
	Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space.
Ceiling Finish	Acoustic Tile System
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is not required. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height; 20 fc required during projection. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.
	• Lighting controls shall be located within close proximity to all entry doors and the instructor's station. Zone lighting in order to allow for proper viewing of projected images in a manner which allows for light fixtures at/near the projection screen(s) to remain off so as not to impede viewing of images on the screen. Lighting over instructor's station and first row to be switched separately.
Doors / Entry	36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion. Actual size, number, and location of doors to be determined by Code based on number of occupants and floor area.</li> </ul>
	<ul> <li>Consider use of oversized door or door with operable leaf to facilitate movement of equipment and furniture</li> </ul>
Acoustics	<ul> <li>Speech should be intelligible without amplification.</li> </ul>
Sight Lines	• View of projection screen(s), whiteboard(s) and/or teaching area shall not be obstructed by building structural elements. Projection screen(s) should be located so as not to obstruct information written on the whiteboards.
Mechanical / Plumbing	
Special Venting	No
, ,	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>
	<ul> <li>An interior environment with a temperature of 73° (± 2°) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.</li> </ul>
	• If chemical fume hoods are to be located in this space, design HVAC accordingly to accommodate. Utilize variable air volume (VAV) systems. Hoods to be provided with alarm monitored by central EMS.
Hot / Cold Water	Yes
	Provide plumbing for hot and cold water (with vacuum breaker) to sinks at room perimeter and at teaching station.
	<ul> <li>Safety station with integrated eyewash preferred to eyewash on sink.</li> </ul>
Other	Piped Services
	<ul> <li>Piped services (air, gas, vacuum, etc.) may be desired in this lab. Design space accordingly to accommodate piped services to student and teaching stations, as required.</li> </ul>

## Teaching and Study Laboratories • Chemistry Labs

#### **CHEMISTRY LABS**

#### **Electrical / Communications / Audio-Visual**

Power

110V; 208V

- Provide power to benches for student connection of laptops and other equipment.
- Standby power may be required for some equipment.
- Equipment utilized in this space may require higher voltage for operation. Verify equipment power requirements with manufacturer specifications.

Voice / Data

Yes; Wi-Fi

- Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.
- All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.
   Building shall be equipped with wireless technology and infrastructure.

- 1. EH&S is responsible for exiting requirements of larger lab spaces.
- 2. Consider locating Chemistry Prep Room adjacent to and accessible from this space. Prep room may be designed to be shared between two instructional labs.
- 3. Casework to be professional quality suitable for the type of science conducted in this space.
- 4. Labs which utilize hoods to be provided with alarm monitored by central EMS.
- 5. Labs should also utilize modular furniture, casework, and equipment, to the greatest extent possible, with fixed benches/fixtures only where necessary, such as at sink or other plumbing locations.
- 6. Furniture selections to be coordinated with built-in and modular casework, equipment, and other room utilities, as requested by User.

## **Teaching and Study Laboratories** • Chemistry Prep Rooms

GENERAL REQUIREMENTS

Capacity and Size

Room Size (min.) 300 ASF ASF per Person (min.) N/A No. of Occupants N/A

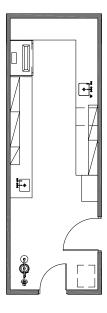
#### Seating

1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

#### Technology, Instructional Aids and Equipment

Not applicable.

#### **SAMPLE ROOM IMAGES**





# **Teaching and Study Laboratories •** Chemistry Prep Rooms

CHEMISTRY PREP ROOMS	
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Resilient Flooring, VCT, or Sealed Concrete
Wall Finish	Painted Gypsum Wallboard
	Wall construction should minimize sound transmission.
Ceiling Finish	Acoustic Tile System
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is not required. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	<ul> <li>Lighting controls shall be located within close proximity to all entry doors.</li> </ul>
Doors / Entry	36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion.</li> </ul>
	<ul> <li>Consider use of oversized door or door with operable leaf to facilitate movement of equipment and furniture</li> </ul>
Acoustics	Not Applicable
Sight Lines	Not Applicable
Mechanical / Plumbing	
Special Venting	No
	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>
	<ul> <li>An interior environment with a temperature of 73<sup>0</sup> (± 2<sup>0</sup>) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.</li> </ul>
	<ul> <li>If chemical fume hoods are to be located in this space, design HVAC accordingly to accommodate. Utilize variable air volume (VAV) systems. Hoods to be provided with alarm monitored by central EMS.</li> </ul>
Hot / Cold Water	Yes
	<ul> <li>Provide plumbing for hot and cold water (with vacuum breaker) to sinks at room perimeter.</li> </ul>
	<ul> <li>Safety station with integrated eyewash preferred to eyewash on sink.</li> </ul>
Other	Piped Services
	<ul> <li>Piped services (air, gas, vacuum, etc.) may be desired in this space. Design space accordingly to accommodate piped services to benchtop, as required.</li> </ul>

## **Teaching and Study Laboratories** • Chemistry Prep Rooms

**CHEMISTRY PREP ROOMS** 

#### **Electrical / Communications / Audio-Visual**

Power

110V; 208V

- Provide power to benches for connection of desktop computers, laptops, and other equipment.
- Standby power may be required for some equipment.
- Equipment utilized in this space may require higher voltage for operation. Verify equipment power requirements with manufacturer specifications.

Voice / Data

Yes; Wi-Fi

- Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.
- All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.
   Building shall be equipped with wireless technology and infrastructure.

- 1. Chemistry Prep Rooms will provide storage and prep area for various chemicals, organic, and inorganic materials utilized in course instruction. Casework to be professional quality suitable for the type of materials stored in this space. Modular casework may be utilized in lieu of built-in casework in some instances.
- 2. Consider locating Chemistry Prep Room adjacent to and accessible from Chemistry Lab. Prep room may be designed to be shared between two instructional labs.
- 3. Furniture selections to be coordinated with built-in and modular casework, equipment, and other room utilities, as requested by User.

# Teaching and Study Laboratories

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#### **Research/Non-Class Laboratories**

## Introduction

S DEFINED BY THE TEXAS Higher Education Coordinating Board (THECB), Laboratory Facilities are rooms designed with "built-in" laboratory equipment such as laboratory benches, specialized equipment, or special utilities (gas, water, steam, etc.). They have been organized in two general categories and will each be provided their own section in this document:

- Teaching and Study Laboratories
- Research/Non-Class Laboratories

Research/Non-Class Laboratories are for laboratory applications, research, and/or training in research methodology. Special equipment is required for staff and/or student experimentation or observation. Included are research laboratories and research laboratory offices.

The following types of research labs are included in this section:

- Dry Research (ie. Electronics)
- Wet Research (ie. Chemical)

No shared support spaces are included in this document. It is the University's intent, at the time of this document's publication, that all labs will be built with the support spaces and equipment required by the researcher within the lab itself.

#### **Research/Non-Class Laboratories**

## **General Design Considerations**

### **Planning Modules and Grids**

Laboratories should be organized around modular planning principles so they are constructed with standardized units or dimensions for flexibility and a variety of uses. Modular planning is used as an organizational tool to allocate space within a building. The module establishes a grid by which walls and partitions are located. As modifications are required because of changes in laboratory use, instrumentation, or departmental organization, partitions can be relocated, doors moved, and laboratories expanded into larger laboratory units, or contracted into smaller laboratory units, without requiring reconstruction of structural or mechanical building elements.

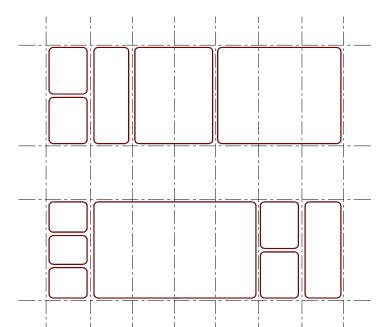
The planning modules may be combined to produce large, open laboratories or subdivided to produce small instrument special-use laboratories.

The use of a planning module also permits the organized and systematic delivery of laboratory piped services, HVAC, fume hood exhaust ducts, power and signal cables. If these services are delivered to each laboratory unit in a consistent manner, then changes in laboratory use requiring addition or deletion of services will be easy to accomplish because of the constant nature of the infrastructure. Utilities provided via overhead service will reduce the cost and difficulty of renovations in the future by limiting need for relocating services provided in partition walls.

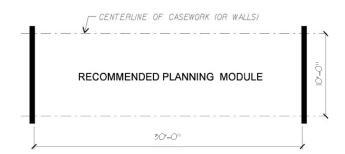
A planning module approximately 10'-0" wide by 30'-0" deep is typically recommended for the laboratory spaces. This module will provide adequate bench space plus space for floor standing equipment and fume hoods, and can be easily divided for smaller support spaces such as equipment and instrument rooms.

Labs should also utilize modular furniture, casework, and equipment, to the greatest extent possible, with fixed benches/fixtures only where necessary, such as at sink or other plumbing locations.

## Research/Non-Class Laboratories



Utilization of a planning module in the laboratories allows for greater flexibility in configuration of the laboratory spaces and minimizes the impact of renovations in the future.



Conceptual diagram of the typical recommended lab planning module size.

## Research/Non-Class Laboratories • Dry Research Labs

#### DRY RESEARCH LABS

#### **GENERAL REQUIREMENTS**

#### **Capacity and Size**

Room Size (min.) See "Additional Notes" ASF per Person (min.) 100 No. of Occupants 2 to 3

#### Seating

1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

#### Technology, Instructional Aids and Equipment

1. Not applicable.

#### **SAMPLE ROOM IMAGES**



# Research/Non-Class Laboratories • Dry Research Labs

	DRY RESEARCH LABS
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Resilient Flooring
Wall Finish	Painted Gypsum Wallboard
	Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space.
Ceiling Finish	Painted Gypsum Wallboard, Acoustic Tile, or Exposed Structure (as required)
	Ceiling height shall be proportional to the room scale.
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is preferred. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height; LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	<ul> <li>Lighting controls shall be located within close proximity to all entry doors.</li> </ul>
Doors / Entry	36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion. Actual size, number, and location of doors to be determined by Code based on number of occupants and floor area.</li> </ul>
	<ul> <li>Consider use of oversized door or door with operable leaf to facilitate movement of equipment and furniture.</li> </ul>
Acoustics	Not Applicable.
Sight Lines	Not Applicable.
Mechanical / Plumbing	
_	No
Special Venting	
	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> <li>This space may contain a large number of heat-producing computer workstations. An interior environment with a temperature of 73° (± 2°) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.</li> </ul>
	<ul> <li>If chemical fume hoods are to be located in this space, design HVAC accordingly to accommodate. Utilize variable air volume (VAV) systems. Hoods to be provided with alarm monitored by central EMS.</li> </ul>
Hot / Cold Water	Yes
	Some research may require a sink be located in the lab. Coordinate requirements with User.
Electrical / Communications	s / Audio-Visual
Power	110V; 208V
Tower	Provide power to benches for connection of desktop / computer laptops and other equipment.
	<ul> <li>Due to nature of research in this space, consideration may be given to the need for increased electrical load capacity.</li> </ul>
	Standby power may be required for some equipment.
	<ul> <li>Equipment utilized in this space may require higher voltage for operation. Verify equipment power requirements with manufacturer specifications.</li> </ul>
Voice / Data	Yes; Wi-Fi
voice / Data	100, 11111

## Research/Non-Class Laboratories • Dry Research Labs

#### DRY RESEARCH LABS

Voice / Data (continued)

- Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Provide power to benchtops, where applicable, for desktop / laptop computer connection and other equipment.
- All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.
   Building shall be equipped with wireless technology and infrastructure.

- 1. Size of actual lab will be determined by research which is to occur within it. At a minimum, 300 ASF should be provided per Principal Investigator (PI) per lab module. Research may require additional lab modules.
- 2. Research in lab type will be predominantly computer driven.
- 3. Casework to be professional quality suitable for the type of science conducted in this space.
- 4. Labs which utilize hoods to be provided with alarm monitored by central EMS.
- 5. Labs should also utilize modular furniture, casework, and equipment, to the greatest extent possible, with fixed benches/fixtures only where necessary, such as at sink or other plumbing locations.

## **Research/Non-Class Laboratories** • Wet Research Labs

WET RESEARCH LABS

#### **GENERAL REQUIREMENTS**

#### **Capacity and Size**

Room Size (min.) See "Additional Notes" ASF per Person (min.) 100 No. of Occupants 2 to 3

#### Seating

1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

#### Technology, Instructional Aids and Equipment

1. Not applicable.

#### SAMPLE ROOM IMAGES



## **Research/Non-Class Laboratories •** Wet Research Labs

WET RESEARCH LABS	
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Resilient Flooring or Sealed Concrete
Wall Finish	Painted Gypsum Wallboard
	Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space.
Ceiling Finish	Painted Gypsum Wallboard, Acoustic Tile, or Exposed Structure (as required)
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is preferred. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height; LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	<ul> <li>Lighting controls shall be located within close proximity to all entry doors.</li> </ul>
Doors / Entry	36" x 84" (min.); Controlled Access (ie. key card)
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion. Actual size, number, and location of doors to be determined by Code based on number of occupants and floor area.</li> </ul>
	Consider use of oversized door or door with operable leaf to facilitate movement of equipment and furniture.
Acoustics	Not Applicable
Sight Lines	Not Applicable
Mechanical / Plumbing	
Special Venting	No
	• Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.
	<ul> <li>An interior environment with a temperature of 73<sup>0</sup> (± 2<sup>0</sup>) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.</li> </ul>
	If chemical fume hoods are to be located in this space, design HVAC accordingly to accommodate. Utilize variable air volume (VAV) systems. Hoods to be provided with alarm monitored by central EMS.
Hot / Cold Water	Yes  Provide plumbing for hot and cold water (with vacuum breaker) to sinks at room perimeter.
	Safety station with integrated eyewash preferred to eyewash on sink.
Other	Piped Services
	<ul> <li>Piped services (air, gas, vacuum, etc.) may be desired in this lab. Design space accordingly to accommodate piped services to benchtop, as required. Consider providing services via overhead service carrier for greater flexibility.</li> </ul>

### Research/Non-Class Laboratories • Wet Research Labs

WET RESEARCH LABS

#### **Electrical / Communications / Audio-Visual**

#### Power

110V; 208V

- Provide power to benches for connection of desktop / computer laptops and other equipment.
- Due to nature of research in this space, consideration may be given to the need for increased electrical load capacity.
- Standby power may be required for some equipment.
- Equipment utilized in this space may require higher voltage for operation. Verify equipment power requirements with manufacturer specifications.

#### Voice / Data

#### Yes; Wi-Fi

- Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.
- All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.
   Building shall be equipped with wireless technology and infrastructure.

- 1. Size of actual lab will be determined by research which is to occur within it. At a minimum, 300 ASF should be provided per Principal Investigator (PI) per lab module. Research may require additional lab modules.
- 2. Casework to be professional quality suitable for the type of science conducted in this space.
- 3. Labs which utilize hoods to be provided with alarm monitored by central EMS.
- 4. Labs should also utilize modular furniture, casework, and equipment, to the greatest extent possible, with fixed benches/fixtures only where necessary, such as at sink or other plumbing locations.

## **Research/Non-Class Laboratories**

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### **Office Facilities**

## Introduction

FFICE FACILITIES, AS DEFINED BY the Texas Higher Education Coordinating Board (THECB), are individual, multi person, or workstation space specifically assigned to academic, administrative, and service functions of the institution.

The following types of classroom facilities are included in this section:

- Offices and Workstations
  - Private Offices
  - Open Workstations
- Reception Areas
- Conference / Meeting Rooms
  - Large Conference / Meeting Room (20 30 seats)
  - □ Small Conference / Meeting Room (10 12 seats)
- Breakrooms
- Workrooms
- File and General Storage Rooms

#### Office Facilities • Private Offices

# GENERAL REQUIREMENTS Capacity and Size Room Size (min.) 120 ASF ASF per Person (min.) N/A No. of Occupants 1 + Guest(s)

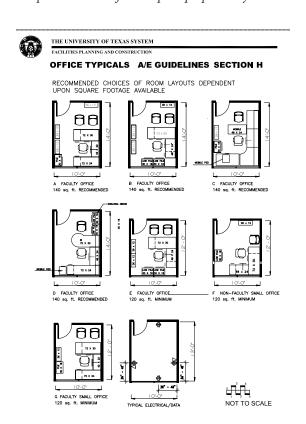
#### Seating

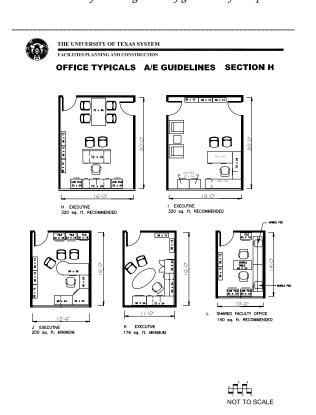
1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

#### Technology, Instructional Aids and Equipment

Not applicable.

#### **SAMPLE ROOM IMAGES**





## **Office Facilities • Private Offices**

	PRIVATE OFFICES
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Carpet
Wall Finish	Painted Gypsum Wallboard
	<ul> <li>Wall construction should minimize sound transmission. Executive office walls shall extend to under- side of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space.</li> </ul>
Ceiling Finish	Painted Gypsum Wallboard; Acoustic Tile
	Ceiling height shall be proportional to the room scale.
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is preferred. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	<ul> <li>Lighting controls shall be located within close proximity to all entry doors.</li> </ul>
Doors / Entry	36" x 84" (min.); Keyed Lock
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> <li>Locate doors within space to minimize congestion.</li> </ul>
Acoustics	<ul> <li>Speech should be intelligible without amplification.</li> </ul>
Sight Lines	<ul> <li>Not applicable.</li> </ul>
Mechanical / Plumbing	
Special Venting	No
	Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.
	<ul> <li>An interior environment with a temperature of 73<sup>0</sup> (± 2<sup>0</sup>) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.</li> </ul>
Hot / Cold Water	No
Electrical / Communications	/ Audio-Visual
Power	110V
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture.</li> </ul>
Voice / Data	Yes; Wi-Fi
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> </ul>
	<ul> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.</li> <li>Building shall be equipped with wireless technology and infrastructure.</li> </ul>

- 1. Reference Appendix H (images above) of the UT System OFPC Owner's Design Guidelines for minimum recommended private office layout by position and/or job function. Typical sizes are as follows:
- Faculty Office: 120 ASF to 140 ASF
- Non-Faculty Office: 120 ASF
- Executive Department Head: 176 ASF
- Executive Dean: 200 ASF to 320 ASF

## **Office Facilities • Open Workstations**

## OPEN WORKSTATIONS

# GENERAL REQUIREMENTS Capacity and Size

Room Size (min.)

48 ASF to 64 ASF

ASF per Person (min.)

N/A

No. of Occupants

1

#### Seating

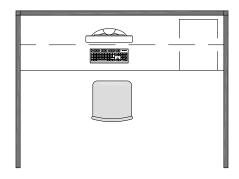
1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

#### Technology, Instructional Aids and Equipment

Not applicable.

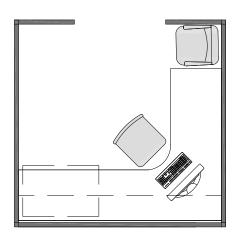
#### **SAMPLE ROOM IMAGES**





Sample: 48 Square Foot Workstation





Sample: 64 Square Foot Workstation

## Office Facilities • Open Workstations

	OPEN WORKSTATIONS
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	See "Additional Notes"
Wall Finish	See "Additional Notes"
Ceiling Finish	See "Additional Notes"
Lighting	See "Additional Notes"
	<ul> <li>Natural light is preferred. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
Doors / Entry	Not Applicable
Acoustics	Not Applicable
Sight Lines	Not Applicable
Mechanical / Plumbing	
Special Venting	No
	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> <li>An interior environment with a temperature of 73° (± 2°) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.</li> </ul>
Hot / Cold Water	No
Electrical / Communications /	'Audio-Visual
Power	110V
	<ul> <li>When locating power outlets, pay special attention to the location of equipment, furniture, and work- station power whips.</li> </ul>
Voice / Data	Yes; Wi-Fi
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department. Building shall be equipped with wireless technology and infrastructure.</li> </ul>
	<ul> <li>Both power and data should be provided through base of workstation.</li> </ul>

- 1. This space is an open workstation utilizing modular system wall panels. The minimum workstation size will be determined by position and/or job function.
- 2. This room type is an open workstation located within a larger room or area. Floor, wall, ceiling and lighting finishes will be dependent on space within which workstation is located.
- 3. Modular system wall panels are available in a variety of heights to provide various levels of privacy, visibility, acoustics, and file/storage requirements. Coordinate panel wall height with User.
- 4. Workstations in an 'L' or 'U' shaped configuration are preferred.

## **Office Facilities • Reception Areas**

#### RECEPTION AREAS

#### **GENERAL REQUIREMENTS**

#### **Capacity and Size**

Room Size (min.) Varies - See "Additional Notes" ASF per Person (min.) 20 No. of Occupants Varies

#### Seating

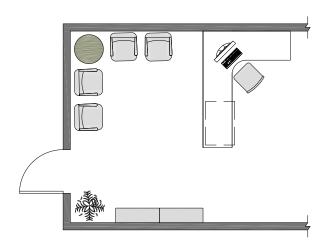
1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

#### Technology, Instructional Aids and Equipment

1. Not applicable.

#### **SAMPLE ROOM IMAGES**

Examples included are for conceptual purposes only and are not intended to dictate the final design or configuration of the space.



This space often works in conjunction with an open workstation area which houses a receptionist or administrative assistant who welcomes guests and acts as a "gatekeeper."





## **Office Facilities • Reception Areas**

	RECEPTION AREAS
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Carpet or Resilient Flooring
Wall Finish	Painted Gypsum Wallboard
	<ul> <li>Wall construction should minimize sound transmission.</li> </ul>
	• To increase visibility and light within a space, consider the utilization of a glass storefront system.
Ceiling Finish	Painted Gypsum Wallboard; Acoustic Tile
	Ceiling height shall be proportional to the room scale.
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is preferred. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	<ul> <li>Lighting controls shall be located within close proximity to all entry doors.</li> </ul>
Doors / Entry	36" x 84" (min.); Keyed Lock
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion.</li> </ul>
Acoustics	Not Applicable
Sight Lines	Not Applicable
Mechanical / Plumbing	
Special Venting	No
	• Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.
	• An interior environment with a temperature of $73^{0}$ ( $\pm$ $2^{0}$ ) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.
Hot / Cold Water	No
Electrical / Communications	/ Audio-Visual
Power	110V
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture.</li> </ul>
Voice / Data	Yes; Wi-Fi (at Open Workstation)
	Reference "Open Workstations" for minimum requirements.

- 1. Reception Area size is for seating area only and will vary based upon the number of guests anticipated on a daily basis at any given time. For example, a department with a large undergraduate population may see, on average, at any given time, 6 students requiring a Reception Area measuring 120 ASF (min.). A smaller department may require a seating area for up to 2 guests at a time (40 ASF min.).
- 2. This space will often work in conjunction with an adjacent Open Workstation which houses a receptionist, administrative assistant, or workstudy to welcome guests. See "Open Workstations" for minimum workstation sizes and space requirements.
- 3. Consideration may be given to the upgrade of finishes in this area as it will serve as the "front door" and public face of a department or program for the University. Consider branding and image when designing this space.

## **Office Facilities** • Large Conference / Meeting Rooms

### LARGE CONFERENCE / MEETING ROOMS

#### **GENERAL REQUIREMENTS**

#### **Capacity and Size**

Room Size (min.) 600 ASF (24 seat capacity) ASF per Person (min.) 25 No. of Occupants 20 to 30

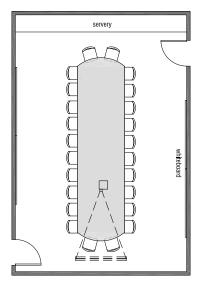
#### Seating

1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

#### Technology, Instructional Aids and Equipment

- 1. Consider the use of flat screen LCD monitor with cable and data input in this space (in lieu of traditional projector/screen).
- 2. Consider providing whiteboards on two walls.

#### **SAMPLE ROOM IMAGES**





## **Office Facilities** • Large Conference / Meeting Rooms

	LARGE CONFERENCE / MEETING ROOMS
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Carpet
Wall Finish	Painted Gypsum Wallboard
	<ul> <li>Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space</li> </ul>
Ceiling Finish	Painted Gypsum Wallboard; Acoustic Tile
	Ceiling height shall be proportional to the room scale.
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is preferred. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at table height; 20 fc required during projection. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	• Lighting controls shall be located within close proximity to all entry doors. Zone lighting in order to allow for proper viewing of projected images in a manner which allows for light fixtures at/near the projection screen or LCD monitor to remain off so as not to impede viewing of images on the screen.
Doors / Entry	36" x 84" (min.); Keyed Lock
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion.</li> </ul>
Acoustics	<ul> <li>Speech should be intelligible without amplification.</li> </ul>
Sight Lines	• View of projection screen(s) and/or whiteboard(s) shall not be obstructed by building structural elements.
Mechanical / Plumbing	
Special Venting	No
.,	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>
	<ul> <li>An interior environment with a temperature of 73<sup>0</sup> (± 2<sup>0</sup>) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.</li> </ul>
Hot / Cold Water	No
Electrical / Communications	/ Audio-Visual
Power	110V
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture.</li> </ul>
Voice / Data	Yes; Wi-Fi
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Consider providing power to table for connection of laptops and other equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> </ul>
	<ul> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.</li> <li>Building shall be equipped with wireless technology and infrastructure.</li> </ul>

<sup>1.</sup> Space should be designed to allow for 24 people (min.) at the table, as well as additional seating on the room perimeter. A small servery area should also be provided to allow for coffee or catered food service during meetings.

## Office Facilities • Small Conference / Meeting Rooms

# SMALL CONFERENCE / MEETING ROOMS GENERAL REQUIREMENTS Capacity and Size Room Size (min.) 300 ASF (12 seat capacity) ASF per Person (min.) 25 No. of Occupants 10 to 12

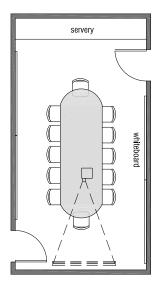
#### Seating

1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

#### Technology, Instructional Aids and Equipment

- 1. Consider the use of flat screen LCD monitor with cable and data input in this space (in lieu of traditional projector/screen).
- 2. Consider providing whiteboards on two walls.

#### **SAMPLE ROOM IMAGES**





## **Office Facilities** • Small Conference / Meeting Rooms

	SMALL CONFERENCE / MEETING ROOMS
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Carpet
Wall Finish	Painted Gypsum Wallboard
	<ul> <li>Wall construction should minimize sound transmission. Walls shall extend to underside of the roof deck or floor above or be specially attenuated to limit noise intrusion to/from this space</li> </ul>
Ceiling Finish	Painted Gypsum Wallboard; Acoustic Tile
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is preferred. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at table height; 20 fc required during projection. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	<ul> <li>Lighting controls shall be located within close proximity to all entry doors. Zone lighting in order to allow for proper viewing of projected images in a manner which allows for light fixtures at/near the projection screen or LCD monitor to remain off so as not to impede viewing of images on the screen.</li> </ul>
Doors / Entry	36" x 84" (min.); Keyed Lock
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion.</li> </ul>
Acoustics	<ul> <li>Speech should be intelligible without amplification.</li> </ul>
Sight Lines	<ul> <li>View of projection screen(s) and/or whiteboard(s) shall not be obstructed by building structural elements.</li> </ul>
Mechanical / Plumbing	
Special Venting	No
Special venting	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>
	<ul> <li>An interior environment with a temperature of 73<sup>0</sup> (± 2<sup>0</sup>) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.</li> </ul>
Hot / Cold Water	No
Electrical / Communications	/ Audio-Visual
Power	110V
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture.</li> </ul>
Voice / Data	Yes; Wi-Fi
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Consider providing power to table for connection of laptops and other equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.</li> </ul>
	Building shall be equipped with wireless technology and infrastructure.

<sup>1.</sup> Space should be designed to allow for 12 people (min.) at the table. A small servery area should also be provided to allow for coffee or catered food service during meetings.

## **Office Facilities • Breakrooms**

### BREAKROOMS (LARGE / MEDIUM / SMALL)

### **GENERAL REQUIREMENTS**

### **Capacity and Size**

Room Size (min.)	Small: 100 ASF	ASF per Person (min.)	25	No. of Occupants	2 to 4
Room Size (min.)	Medium: 200 ASF	ASF per Person (min.)	25	No. of Occupants	6 to 8
Room Size (min.)	Large: 300 ASF	ASF per Person (min.)	30	No. of Occupants	10 to 12

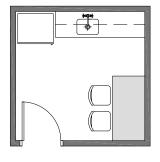
### Seating

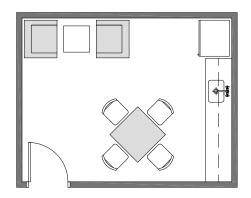
1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

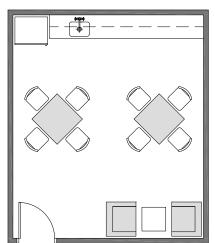
### Technology, Instructional Aids and Equipment

1. Not applicable.

### **SAMPLE ROOM IMAGES**













Sample: Medium Breakroom



Sample: Large Breakroom

## **Office Facilities • Breakrooms**

	BREAKROOMS (LARGE / MEDIUM / SMALL)
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Resilient Flooring
Wall Finish	Painted Gypsum Wallboard
	<ul> <li>Wall construction should minimize sound transmission between this space and adjacent spaces, especially when located adjacent to offices and/or classrooms.</li> </ul>
Ceiling Finish	Acoustic Tile
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is not required. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	<ul> <li>Lighting controls shall be located within close proximity to all entry doors.</li> </ul>
Doors / Entry	36" x 84" (min.); Keyed Lock
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion.</li> </ul>
Acoustics	Not Applicable
Sight Lines	Not Applicable
Mechanical / Plumbing	
Special Venting	No
Special venting	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>
	<ul> <li>An interior environment with a temperature of 73° (± 2°) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.</li> </ul>
Hot / Cold Water	Yes
riot/ cold water	<ul> <li>Provide plumbing for hot and cold water to single compartment sink and to refrigerator water dispenser and ice maker, as required. No dishwasher shall be provided.</li> </ul>
Electrical / Communications	s / Audio-Visual
Power	110V
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture.</li> </ul>
Voice / Data	Yes; Wi-Fi
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> </ul>
	<ul> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.</li> <li>Building shall be equipped with wireless technology and infrastructure.</li> </ul>

### ADDITIONAL NOTES / REQUIREMENTS

1. Consideration should be given, where applicable, to the location of this space near conference/meeting rooms to support catered meetings and events.

## **Office Facilities • Workrooms**

#### 

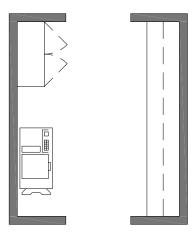
### Seating

1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

### Technology, Instructional Aids and Equipment

Not applicable.

### **SAMPLE ROOM IMAGES**





## Office Facilities • Workrooms

	WORKROOMS
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Resilient Flooring or Carpet
Wall Finish	Painted Gypsum Wallboard
	<ul> <li>Wall construction should minimize sound transmission between this space and adjacent spaces, especially when located adjacent to offices and/or classrooms.</li> </ul>
Ceiling Finish	Acoustic Tile
	<ul> <li>Ceiling height shall be proportional to the room scale.</li> </ul>
Lighting	Non-Glare Fluorescent; LED
	<ul> <li>Natural light is not required. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	<ul> <li>Lighting controls shall be located within close proximity to all entry doors.</li> </ul>
Doors / Entry	36" x 84" (min.); Keyed Lock
Doors / Linky	<ul> <li>Where designed as a separate room, provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> </ul>
	<ul> <li>Locate doors within space to minimize congestion.</li> </ul>
Acoustics	Not Applicable
Sight Lines	Not Applicable
Mechanical / Plumbing	
Special Venting	No
	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>
	• An interior environment with a temperature of $73^{\circ}$ ( $\pm$ $2^{\circ}$ ) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.
Hot / Cold Water	No
Electrical / Communications	s / Audio-Visual
Power	110V; 208V
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture.</li> </ul>
Voice / Data	Yes; Wi-Fi
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> </ul>
	<ul> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.</li> <li>Building shall be equipped with wireless technology and infrastructure.</li> </ul>
	• Verify type of power and data requirements for printer / copier; a dedicated circuit and data port

### **ADDITIONAL NOTES / REQUIREMENTS**

1. Size of Workroom will be dependent upon department(s) served. Space should be configured to allow for several individuals to perform multiple activities (document printing, layout, assembly, etc.) at one time.

should be provided.

2. Workrooms should be centrally located to the department(s) which they serve. They may be designed as separate rooms or located in open "alcoves" or "niches." Provide sound attenuation in walls to keep equipment noise in the room from distracting staff in the adjacent workspaces.

## Office Facilities • File and General Storage Rooms

### FILE AND GENERAL STORAGE ROOMS

### **GENERAL REQUIREMENTS**

### **Capacity and Size**

Room Size (min.) 100 ASF ASF per Person (min.) N/A No. of Occupants N/A

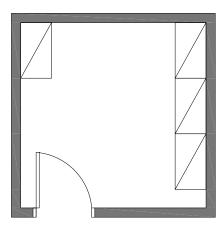
### Seating

1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

### Technology, Instructional Aids and Equipment

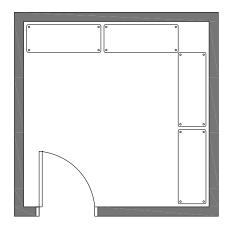
Not applicable.

#### **SAMPLE ROOM IMAGES**



Sample: File Storage Room





Sample: General Storage Room



## Office Facilities • File and General Storage Rooms

	FILE AND GENERAL STORAGE ROOMS
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	Resilient Flooring or Carpet
Wall Finish	Painted Gypsum Wallboard
Ceiling Finish	Acoustic Tile  Ceiling height shall be proportional to the room scale.
Lighting	<ul> <li>Non-Glare Fluorescent; LED</li> <li>Natural light is not required. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> <li>Provide fluorescent light for general overhead lighting. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
	<ul> <li>Lighting controls shall be located within close proximity to all entry doors.</li> </ul>
Doors / Entry	36" x 84" (min.); Keyed Lock
	<ul> <li>Provide vision lite in entry door(s) for visual access from the building corridors or adjacent spaces.</li> <li>Locate doors within space to minimize congestion.</li> </ul>
Acoustics	Not Applicable
Sight Lines	Not Applicable
Mechanical / Plumbing	
Special Venting	No  Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.  An interior environment with a temperature of 73° (± 2°) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.
Hot / Cold Water	No
Electrical / Communications	/ Audio-Visual
Power	110V
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture.</li> </ul>
Voice / Data	No; Wi-Fi
	Consideration may be given to the design of this space for future conversion to an office or workspace. With this in mind, the User may desire to include data outlets in this space. Building shall be equipped with wireless technology and infrastructure.

- 1. In general, high density shelving will not be utilized on campus. Open shelving and / or file cabinets will be utilized in the majority of cases. Room size will be dependent on the amount of secure storage required by a program or department.
- 2. When configuring the room, space should be deeper than it is wide to allow for maximum storage capability.

## **Office Facilities**

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## **Building Common Spaces**

## Introduction

**B** UILDING COMMON SPACES, AS DEFINED by the Texas Higher Education Coordinating Board (THECB), are general use facilities characterized by their broad availability to faculty, students, staff, or general public.

The following types of common areas are included in this section:

- Lobbies / Pre-Function Areas
- Collaborative Learning Areas
- Automated Services (Vending, ATM, etc.)
- Student Seating / Distributed Gathering Areas

## **Building Common Spaces** • Lobbies / Pre-Function Areas

### LOBBIES / PRE-FUNCTION AREAS

### **GENERAL REQUIREMENTS**

### **Capacity and Size**

Room Size (min.) 500 ASF (or proportional to building) ASF per Person (min.) N/A No. of Occupants Varies

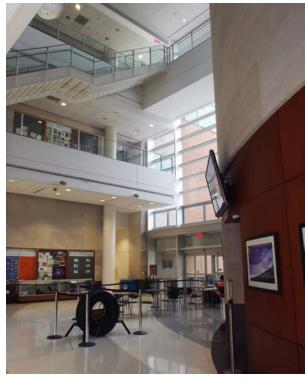
### Seating

1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

### Technology, Instructional Aids and Equipment

Not applicable.

### **SAMPLE ROOM IMAGES**









## **Building Common Spaces** • Lobbies / Pre-Function Areas

	LOBBIES / PRE-FUNCTION AREAS
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	See "Additional Notes"
Wall Finish	See "Additional Notes"
	<ul> <li>Consider use of glass curtain wall to increase natural light and connectivity to the exterior environment.</li> <li>Utilize low-e or tinted glazing to reduce heat gain in space.</li> </ul>
Ceiling Finish	See "Additional Notes"
Lighting	See "Additional Notes"
	<ul> <li>Natural light is preferred. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.
Doors / Entry	(2) 36" x 84" (min.); Controlled Access (ie. key card)
Acoustics	Not Applicable
Sight Lines	Not Applicable
Mechanical / Plumbing	
Special Venting	No
	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>
	■ An interior environment with a temperature of $73^0$ (± $2^0$ ) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.
Hot / Cold Water	No
Electrical / Communications	s / Audio-Visual
Power	110V
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture.</li> </ul>
Voice / Data	Yes; Wi-Fi
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> </ul>
	<ul> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.</li> <li>Building shall be equipped with wireless technology and infrastructure.</li> </ul>

- Security of space and building is important. Consider whether a staffed security or information desk will be required based on building type/function.
- 2. This space should be considered as an informal gathering space for students and faculty, as well as building front door, providing a sense of arrival, place, and an inviting atmosphere. Space should be flexible to support after-hours and pre-function events (ie. wine and cheese gatherings). Soft seating and casual laptop space should be provided.
- 3. Design of this space as a double-height or multi-story space should be considered to create a statement. Consider providing vertical and horizontal connection(s) to upper level(s), where applicable, through this area to increase architectural interest and promote way-finding.
- 4. Consideration should be given to the upgrade of finishes in this area since it will represent the University to the public. Finishes should be tasteful and appropriate.

## **Building Common Spaces** • Collaborative Learning Areas

### **COLLABORATIVE LEARNING AREAS**

### **GENERAL REQUIREMENTS**

### **Capacity and Size**

Room Size (min.) 80 ASF (4 seat capacity) ASF per Person (min.) 20 No. of Occupants 4 to 6

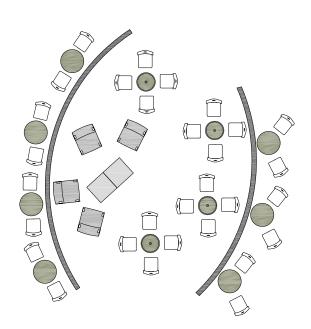
### Seating

1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

### Technology, Instructional Aids and Equipment

1. These are informal spaces for 4 to 6 students that allow them to have impromptu meetings for study or discussion. Spaces may include whiteboards or technologically advanced visual collaborative workspace (ie. where the walls become the whiteboard, but with the advantages of recording, display, and playback, etc. that technology can provide).

### **SAMPLE ROOM IMAGES**









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## **Building Common Spaces** • Collaborative Learning Areas

	COLLABORATIVE LEARNING AREAS		
PHYSICAL ENVIRONMENT			
Architectural			
Floor Finish	See "Additional Notes"		
Wall Finish	See "Additional Notes"		
Ceiling Finish	See "Additional Notes"		
Lighting	See "Additional Notes"		
	<ul> <li>Natural light is not required. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>		
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>		
Doors / Entry	Not Applicable		
Acoustics	Not Applicable		
Sight Lines	Not Applicable		
Mechanical / Plumbing			
Special Venting	No		
	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>		
	■ An interior environment with a temperature of $73^0$ (± $2^0$ ) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.		
Hot / Cold Water	No		
Electrical / Communications	/ Audio-Visual		
Power	110V		
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture.</li> </ul>		
	<ul> <li>Where applicable, consider providing power to tables for student connection of laptops and other equipment.</li> </ul>		
Voice / Data	Yes; Wi-Fi		
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> </ul>		
	<ul> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.</li> <li>Building shall be equipped with wireless technology and infrastructure.</li> </ul>		

### **ADDITIONAL NOTES / REQUIREMENTS**

1. This space may utilize modular system wall panels to form the boundaries of the area and create a semi-private area. This room type is often located within a larger room or area. Floor, wall, ceiling and lighting finishes will be dependent on space within which Collaborative Learning Area is located.

## **Building Common Spaces • Automated Services**

### AUTOMATED SERVICES

### **GENERAL REQUIREMENTS**

### **Capacity and Size**

Room Size (min.) 80 ASF (up to 3 machines) ASF per Person (min.) N/A No. of Occupants N/A

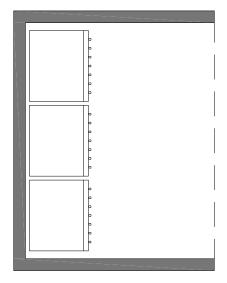
### Seating

Not applicable.

### Technology, Instructional Aids and Equipment

Not applicable.

### SAMPLE ROOM IMAGES







## **Building Common Spaces** • Automated Services

	AUTOMATED SERVICES	
PHYSICAL ENVIRONMENT		
Architectural		
Floor Finish	See "Additional Notes"	
Wall Finish	See "Additional Notes"	
	<ul> <li>Wall construction should minimize sound transmission.</li> </ul>	
Ceiling Finish	See "Additional Notes"	
Lighting	See "Additional Notes"	
	<ul> <li>Natural light is not required. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>	
	<ul> <li>Provide fluorescent light for general overhead lighting. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>	
Doors / Entry	Not Applicable	
Acoustics	Not Applicable	
Sight Lines	Not Applicable	
Mechanical / Plumbing		
Special Venting	No	
	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>	
	■ An interior environment with a temperature of $73^0$ (± $2^0$ ) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.	
Hot / Cold Water	Yes	
	<ul> <li>Vending machines may require water service (ie. instant coffee vending). Coordinate requirements with vending machine vendor.</li> </ul>	
Electrical / Communications /	Audio-Visual	

#### Electrical / Communications / Audio-Visual

Power

110V; 208V

- Locate electrical outlet(s) at wall(s) where vending machines and/or ATMs are to be located. Coordinate outlet(s) with vending machine and/or ATM location.
- Equipment utilized in this space may require higher voltage for operation. Verify equipment power requirements with manufacturer specifications.

Voice / Data

Yes; Wi-Fi

- Provide adequate data to operate ATM; coordinate with machine location. Data outlets may also be required for vending machines which utilize card readers. Coordinate requirements with vending machine vendor.
- All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.
   Building shall be equipped with wireless technology and infrastructure.

- 1. To prevent disruption of instruction related to noise transference from this space, it is recommended this space not be located adjacent to classrooms and instructional areas.
- 2. This room type is often located within a larger room or area. Floor, wall, ceiling and lighting finishes will be dependent on space within which Automated Services are located.

## **Building Common Spaces • Student Seating / Distributed Gathering Areas**

### STUDENT SEATING / DISTRIBUTED GATHERING AREAS

### **GENERAL REQUIREMENTS**

### **Capacity and Size**

Room Size (min.) 80 ASF (4 seat capacity) ASF per Person (min.) 20 No. of Occupants Varies

### Seating

1. Design of space shall comply with applicable ADA Guidelines and Texas Accessibility Standards (TAS) requirements for accessibility.

### Technology, Instructional Aids and Equipment

Not applicable.

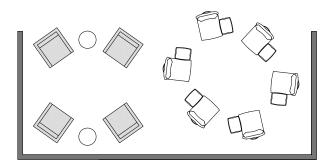
### **SAMPLE ROOM IMAGES**











## **Building Common Spaces** • Student Seating / Distributed Gathering Areas

	STUDENT SEATING / DISTRIBUTED GATHERING AREAS
PHYSICAL ENVIRONMENT	
Architectural	
Floor Finish	See "Additional Notes"
Wall Finish	See "Additional Notes"
Ceiling Finish	See "Additional Notes"
Lighting	See "Additional Notes"
	<ul> <li>Natural light is preferred to create a comfortable and inviting environment. Where applicable, windows shall be provided with blinds or shades to control natural light.</li> </ul>
	<ul> <li>Provide fluorescent light for general overhead lighting. Min. 80 to 100 footcandle (fc) required at desk height. LED lighting is under evaluation at UT Arlington. Consult Facilities Management for possible inclusion.</li> </ul>
Doors / Entry	Not Applicable
Acoustics	Not Applicable
Sight Lines	Not Applicable
Mechanical / Plumbing	
Special Venting	No
	<ul> <li>Fresh air shall be supplied and spaces ventilated in accordance with the International Mechanical Code.</li> </ul>
	■ An interior environment with a temperature of $73^0$ (± $2^0$ ) Fahrenheit is desired. Design HVAC system accordingly to achieve this temperature.
Hot / Cold Water	No
Electrical / Communications	/ Audio-Visual
Power	110V
	Provide area with power strip for electronic device charging.
	<ul> <li>When locating power outlets, pay special attention to the location of equipment and furniture.</li> </ul>
Voice / Data	Yes; Wi-Fi
	<ul> <li>Provide adequate power and data to operate equipment located in this space. Coordinate outlet location with location of equipment. Reference UT Arlington IT Standards for minimum technology package to be provided in this space.</li> </ul>
	<ul> <li>All data cable shall be installed per UT Arlington Standards and as directed by the IT Department.</li> <li>Building shall be equipped with wireless technology and infrastructure.</li> </ul>

- 1. This space type is an informal area where students can work on their laptops or wait between classes. Provide soft seating, tables and chairs, and charging stations within seating alcoves and a large number of electrical outlets and WiFi access points to support activity.
- 2. This space type is often located within a larger room or area located adjacent to and accessible from public corridors. Floor, wall, ceiling and lighting finishes will be dependent on space within which Student Seating / Distributed Gathering Areas are located.
- 3. To prevent disruption of instruction related to noise transference from this space, it is recommended that this space not be located adjacent to classrooms.

# **Building Common Spaces**

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### **Non-Assignable Spaces**

## Introduction

S EVERAL REQUIRED FUNCTIONAL SPACES MUST be included in the building, though they are not considered "assignable" as defined by the Texas Higher Education Coordinating Board (THECB). These spaces include general circulation and lobby areas (including stairs and elevators), mechanical spaces, restrooms, utility/telephone/network closets and housekeeping closets, as well as any other infrastructure and support spaces which may result from the building's design. Non-Assignable Spaces are not assigned to directly support programs but are necessary for the general operation of a building.

These spaces include, but are not limited to, the following types of areas:

- Safe Rooms
- Housekeeping/Custodial Closets
- Telecommunications Closets (MDF/IDF)
- Mechanical Rooms
- Electrical Closets
- Hallways / Corridors
- Elevators
- Restrooms (Mens, Womens, Unisex/Family)
- Building Recycling and Trash Collection
- Loading and Service
- Exterior Spaces

The Non-Assignable Spaces often make up approximately 30 to 40 percent of the total building gross square feet (GSF). The amount is dependent on the building type being designed (ie. general academic, laboratory, administrative, etc.). The balance of the total GSF consists of the building structure (wall systems, columns, structure) and the actual usable, programmed space of the building.

## **Non-Assignable Spaces**

## **General Design Considerations**

### **Safe Rooms**

Consideration should be given to the inclusion of a safe room in each building or on each floor which may be utilized in the event of natural disaster or security threat on the campus.

### **Housekeeping / Custodial Closets**

Provide a minimum of one centrally located custodial closet per floor. The closets should be of sufficient size for a mop sink, mop hanger, cleaning supply shelves, buckets, vacuums, etc.

### **Telecommunications Closets (MDF / IDF)**

These closets should be designed according to institutional standards and specifications, with sufficient conditioned air on a 24-hour basis. The Telecommunications Closet(s) are located in each building, or each floor of a building, where backbone cables transition to horizontal distribution cables. These closets may also contain certain items of network electronics equipment such as routers or switching equipment. To minimize conduit and cable lengths, the closet shall be located as close as practical to the center of the building on each floor. Telecommunications closets should be "stacked" one above the other for multiple floors. Coordinate location of telecommunications closets with campus IT staff.

### **Mechanical Rooms**

This space should be appropriately sized for air handlers, pumps, piping, etc. Provide chases as needed. Provide over-sized access door(s) to facilitate the repair and/or replace equipment located in this space

### **Electrical Closets**

Provide separate closet(s) for electrical panels and other necessary electrical equipment. Provide chases as needed. Do not combine this space with Telecommunications Closets. Where feasible, do not locate electrical closets adjacent to plumbing lines / chases. Do not route water lines above electrical closets.

## **Hallways / Corridors**

Provide wide hallways for large traffic as well as programmatic needs for alcoves, seating, etc. Create opportunities for seating alcoves and display space within the building's public corridors. Seating alcoves and display areas shall not impede or limit the required minimum means of egress.

### **Non-Assignable Spaces**

### **Elevators**

Depending on the building design, more than one elevator may required. This may consist of a passenger elevator and freight elevator, or a combination of the two which is suitable for both passengers and freight. The passenger elevators should be designed to address the volume of people anticipated to be housed in and utilize the building on a daily basis. The freight elevator should be adequately sized to accommodate the movement of furniture, equipment, laboratory equipment, and other materials housed in the building between floors.

### Restrooms

Restrooms must be provided on each level in accordance with code requirements. Restrooms should be easily accessible and ADA compliant. In addition, construction of one Family Restroom (unisex) is required in a building. Locate restrooms easily accessible to building occupants and visitors on each floor of the building. In addition, a private room for nursing mothers may also be required.

### **Building Recycling and Trash Collection**

Collection points within the building or on each floor may be considered to centralize a drop-off area for building users and to minimize the amount of recycling and/or trash circulating through the building. A central room may also be located near the loading dock level which may serve as the collection point for the entire building.

Dumpsters for trash and recycling are typically located adjacent to the loading dock area. All dumpsters should be screened from public view in accordance with the University of Texas at Arlington standards.

## **Loading and Service**

A loading dock area (van height, minimum) may be required for the building in order to facilitate the transportation of equipment/materials within the building. Docks, where provided, should be designed to accommodate forklift access.

## **Exterior Spaces**

In addition to the normal access, parking and delivery functions which are to be included in any project design, the following areas should also be considered to adequately serve the functions proposed to be housed within the facility:

 Provide a mechanical yard to locate the air-cooled chiller, generators, transformers and other mechanical equipment related to the building operations. This yard shall be fenced and/or screened from public view in accordance with The University of Texas at Arlington standards.

## **Non-Assignable Spaces**

- Consider the incorporation of outdoor gathering areas (i.e. courtyards, patios, roof decks, etc.) into the building design.
- Provide bird repellent systems in areas where birds may roost (ie. building porches, overhangs, window sills, etc.) to prevent droppings in areas where droppings would be adverse, such as exterior spaces and entrances.



Frost Bank Tower, Suite 1100 100 West Houston Street San Antonio, Texas 78205 Phone: 210/228-9600 Fax: 210/228-9697 facilityprogramming.com

Architectural Programming Laboratory Planning Healthcare Planning Strategic Facilities Planning Needs Assessment Space Utilization Analysis