

# SOUTH COLLEGE

## BUILDING USER MANUAL



Northeast Exterior Perspective

For additional information regarding building systems and operations, please call the [Facilities & Campus Services Solutions Center](#) at (413) 545-6401.

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\*LEED Gold certification anticipated

# ACKNOWLEDGEMENTS

This building user manual is published by [Facilities & Campus Services](#) to serve as a general resource of information for staff, faculty and students who work, live, and study in campus facilities. It contains information to help familiarize occupants with the facility in a manner that supports the responsible use of building features and leads to personal comfort and efficient use of physical resources.

This manual would not have been possible without the knowledge and time given by many assisting advisors from Facilities & Campus Services including:

## [Henry Merriman](#)

*UMass Project Manager*

## [Kliment Halsband Architects](#)

*Designer / Architect*

## [DiMella Shaffer](#)

*Designer / Architect*

## [Daniel O'Connell's Sons](#)

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*UMass Sustainability Manager*



*Southwest Exterior Perspective  
Courtesy of Kliment Halsband Architects*

*This building user manual is designed to be universally accessible. Visually impaired users may require additional physical orientation. Please contact [UMass Disability Services](#) at (413) 577-0122 for assistance.*

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This user manual was designed to be read in both electronic and print forms. Interactive PDF versions of all building user manuals are accessible through the [UMass Physical Plant](#) and [Campus Planning](#) websites.

***Please consider the environment before printing this manual, and use the digital form whenever possible.***

# I. CONTACTS

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## **Building Coordinator** - Available during regular business hours

Joanne Dolan.....(413) 545-2273  
.....[j.dolan@hfa.umass.edu](mailto:j.dolan@hfa.umass.edu)

## **Classroom Technology Services** - Monday - Friday, 8:00am - 7:00pm

**Auditorium & Classroom Equipment Support**.....(413) 545-5768  
.....[cts@it.umass.edu](mailto:cts@it.umass.edu)

## **Course and Classroom Management** - Monday - Friday, 8:00am - 5:00pm

Assistant Registrar for Scheduling.....(413) 545-2605  
.....[rscheduling@registrar.umass.edu](mailto:rscheduling@registrar.umass.edu)

## **Environmental Health & Safety** - Staffed 24/7/365

.....<https://ehs.umass.edu>  
.....(413) 545-2682

## **Facilities & Campus Services Solution Center** - Staffed 24/7/365

.....(413) 545-6401  
.....<https://www.umass.edu/facilities/requests>

## **Information Technology Services** - Monday - Friday, 8:30am - 5:00pm

IT Support Center.....(413) 545-9400  
.....<https://www.umass.edu/it/support>



## II. BUILDING OVERVIEW

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Established in 1863, the University of Massachusetts Amherst retains a significant collection of buildings which date back to its first period as the Massachusetts Agricultural College. Early campus development focused on the construction of individual buildings to meet specific functional needs for the university. Located at the campus core near Goodell Hall and the [Old Chapel](#), the original South College was completed in 1867. Designed by Severance of Boston, the building served as a male dormitory for 47 students in 23 double rooms, and also contained classrooms, reading rooms, and a natural history collection. South College was destroyed by an accidental fire in February of 1885, caused by the explosion of a kerosene burner in an egg incubator.

Soon thereafter, the state appropriated funds to rebuild South College on its original site and foundation. The replacement South College building was designed by Hartford, Connecticut based architect William Brocklesby. Construction began during the summer of 1885, and was completed for the 1886-1887 school year.

The new building's Chateausque style features a granite foundation, red brick exterior, and traditional asphalt shingle roof. Like its predecessor, the exterior reflected a multipurpose interior. The south wing housed 20 double rooms in three, vertical sections of student dormitories. The east wing became the Biology Department, with classrooms and a museum of specimens. The main tower held additional faculty and administrative offices, as well as a meteorological observatory.

## II. BUILDING OVERVIEW



*Southwest Exterior Perspective*

By 1902, South College had become primarily an administrative building, with one classroom on the basement floor. Further interior and fireproofing renovations were completed in 1939. The architect for this work was Louis Warren Ross, who also designed the Neo-Georgian buildings of the campus's [Northeast Residential Area](#) between 1935 and 1959. The student radio station, [WMUA](#), along with several Deans, provosts, and presidents, have all held offices in the building.

From 2014-2017, South College underwent a major renovation, restoration, and addition project with [DiMella Shaffer](#) and [Kliment Halsband Architects](#). Portions of the existing building were restored to their original materials. All mechanical, electrical, and plumbing systems were updated, including the installation of new life-safety alarms and sprinklers. The facility was also brought up to accessibility code in compliance with the [Americans with Disabilities Act \(ADA\)](#).

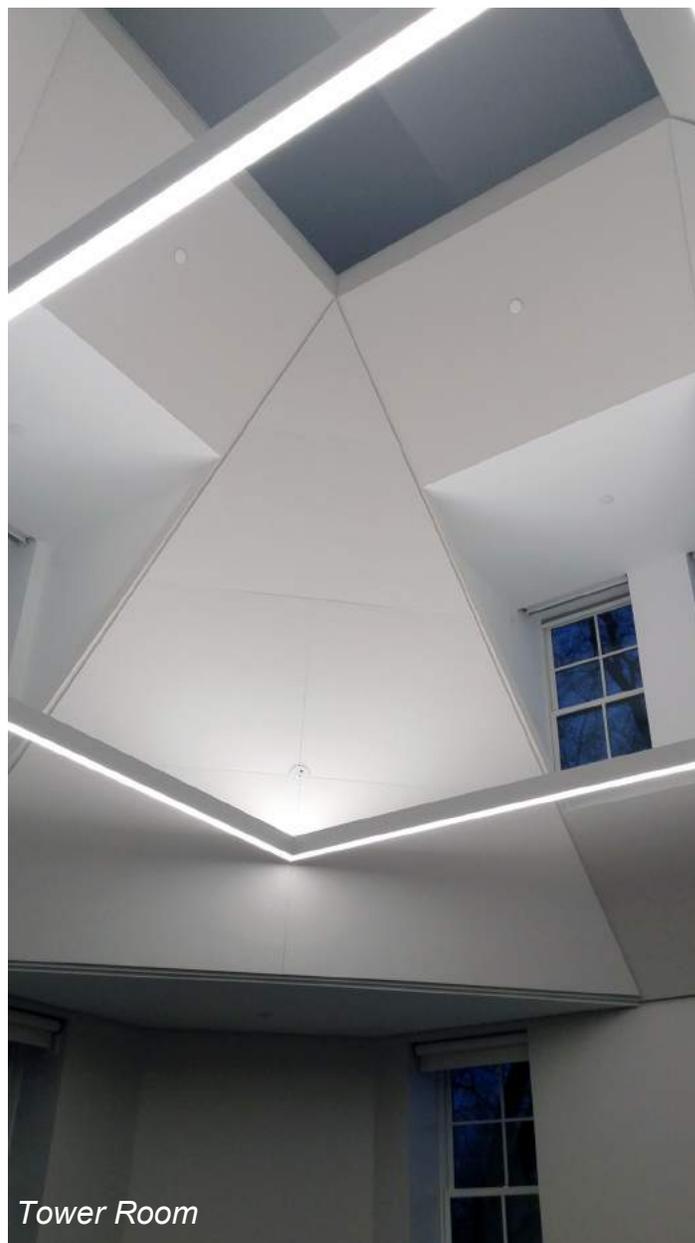
A four-story, 60,000 S.F. addition to South College was constructed on the west side of the building. Massing and materials were carefully selected to complement the original historic structure. The new extension is designed to facilitate accessibility to campus and through the building, with main entrances located on all four sides. The addition includes common areas, faculty offices, and classrooms with state-of-the-art audiovisual communications systems. A three-story, central atrium celebrates the intersection of the old and new. The \$65 million project was financed by UMass through the [University of Massachusetts Building Authority \(UMBA\)](#)

Together, the renovation and addition now serve as the primary home of the [College of Humanities and Fine Arts](#), including the [Dean's Office](#), [HFA Advising](#), and departments of [English](#), [Philosophy](#), [Art History](#), and [Women, Gender & Sexual Studies](#). The project was completed in December 2016, and is currently targeting [LEED Gold Certification](#). To learn more about the South College, visit the building webpage [here](#).

# III. BUILDING RESOURCES

As a responsible member of the University of Massachusetts and town of Amherst community, we hope that you will take your role as faculty, staff, student, or guest seriously and respect the university's facilities, property, and grounds. South College provides a new learning facility which all should have the freedom and privilege to use.

The building features several advanced building systems designed to reduce energy use and facilitate a healthy living and learning environment. This facility was designed to encourage its users to engage in environmentally conscious habits. As a regular building user, ***the contents of this manual will help you to better understand your role in these crucial sustainability efforts.***



*Tower Room*



*Third Floor West Study Commons*

Information regarding staff policies and procedures, including reserving conference rooms and event space, can be found on the [College of Humanities and Fine Arts \(CFA\)](#) website. If you have questions, please contact your Building Coordinator (see [I. Contacts](#)).

# ENTRANCE SERVICE & MAINTENANCE



North Main Entry

## What Is It?

Grilles, grates, and/or mats are located at all main building entrances to help facilitate healthy indoor air quality. **Note that some entrances are designated for service personnel only and are not accessible to the general public.**

## What's My Part?

Please be aware of ongoing building maintenance efforts. **Utilize the available grilles, grates, and mats at main entrances to help reduce the influx of dirt and particulates.**

# KEY CARD ACCESS

## What Is It?

The RP-40 is a multi-technology card reader designed for enhanced security through mutual authentication and data encryption. These devices are located throughout South College as part of an advanced security system with integrated cameras and lighting.

**South College is open to the public weekdays from 7am - 10pm, and locked on weekends.** Alternative card reader systems are installed on interior classroom and administrative doors to protect the technology and systems housed inside during off-hours. **Building faculty, instructors, and departmental staff have access to these spaces after the rooms auto-lock via the door equipped with a card reader.** These readers require direct contact with your card in order to unlock the door.

## How Does It Work?

Readers provide access to valid key cards when scanned. Hold your identification card directly in front of the RP-40 until the top status indicator light turns from red to green. The door is now unlocked. The RP-40 card reader is designed to scan your card through most wallets, small purses, and pocket bags.

Identification cards for physically-impaired users can be programmed to unlock and open exterior doors automatically when scanned. Alternatively, users may press the raised paddle button located to the right of the door to unlock and open it. All exterior doors are equipped with pressure sensors, and will provide a power assist to users when opening.

(Left) RP-40 Card Readers - located at building entrances and service areas



(Right) Harmony Locks™ Interior Card Reader - located in classrooms and departmental spaces

## What's My Part?

If you have a card to access particular spaces outside of standard building operation hours, **please use it responsibly and do not give it out for use by others.** If you have any issues accessing a room using your identification card, please contact the Building Coordinator (see [I. Contacts](#)).

# DOORS - NANAWALL

## Where & What Are They?

NanaWall door systems allow certain sections of glass wall to open up and engage with the adjacent spaces. Integrated wall partitions can either be fixed, or collapsed and folded into an accordion-like configuration as shown.

By specially scheduled college functions and events, these operable wall systems allow the second floor flex classroom (W245) to open into the common central corridor and classroom across the hall (W211), providing a wide range of functionality to accommodate a variety of different activities in the space.

## How Do They Work?



*Open Position - Hall*



*Closed Position - Hall*



*Open Position - Classroom*



*Closed Position - Classroom*

## What's My Part?

The NanaWall is locked as a fixed system by default as shown at the bottom right.

***Please do not attempt to change the door configuration yourself.*** If you require the wall to be changed for an event, please contact [Course and Classroom Management](#) and the [HFA Dean's Office](#) to make arrangements (see [I. Contacts](#)).

# DOORS - WON-DOOR FIREGUARD

## What Are They?

The Won-Door FireGuard folding fire partition is a UL listed safety assembly. It is normally kept in the open position, and housed in a wall storage pocket as shown below. The door is activated and closed upon receiving a signal from the building's fire alarm system (see [Fire Alarm System](#)).



## What's My Part?

The Won-Door FireGuard is part of the fire and life safety equipment of the building and separates the atrium commons from the rest of the building in the event of an emergency. **For user familiarity, please review the fire door demonstration video [here](#).**

## How Do They Work?

The fire door will automatically close upon activation of the building's fire alarm system. Concurrent with the building alarm will be an audible signal sounding a steady tone to indicate that the system is in "Fire Mode."

The door is equipped with a pressure and resistance sensor. Upon encountering an obstruction, the door will pause momentarily, and then resume closing. Only light pressure is needed to activate the sensor.

Once the door has fully closed, it can be reactivated by pressing anywhere on the exit hardware plate. The door will partially retract each time pressure is applied to the plate and pause momentarily. **Use this time to manually push the door open and allow more people to pass through as quickly as possible.** After the pushing force has stopped, the door will pause and automatically recycle closed.

Alternatively, press the exit hardware and push against the front of the door in the open direction while the motor is still engaged. The door will continue to open until the pushing force has stopped, then pause, and recycle closed.

**In the event of complete loss of power, operate the door manually by physically pushing the door back to create an opening.** Trained Physical Plant personnel will reset the door system post-emergency.

# WINDOWS - AWNING

## What Are They?

Aluminum frame, tilt-out awning style windows are located in perimeter offices of the South College addition to improve indoor air quality and occupant comfort.



*Operable Awning Window*

## How Do They Work?

Rotate the handle located at the bottom of the window outward to open your window, and counterclockwise to close it.



*Perimeter Office*

## What's My Part?

Remember that the building's [HVAC system](#) remains engaged when windows are open. To help reduce energy use, **it is your responsibility to keep windows shut when heating or air conditioning systems are running.**

**Please close all windows before leaving your office at the end of the day.** Doing so prevents heat loss overnight, reduces building heating loads, and saves energy.

# WINDOWS - DOUBLE HUNG

## What Are They?

Classrooms and offices in the original portion of South College feature traditional, double-hung windows with an integral mesh screen system. Interior office windows facing into the central atrium are fixed, non-operable units in both the new addition and original renovated building.

## What's My Part?

Remember that the building's [HVAC system](#) remains engaged when windows are open. To help reduce energy use, ***it is your responsibility to keep windows shut when heating or air conditioning systems are running.***

If you experience issues operating the windows or screen system, please contact the Building Coordinator (see [I. Contacts](#)).



## How Do They Work?

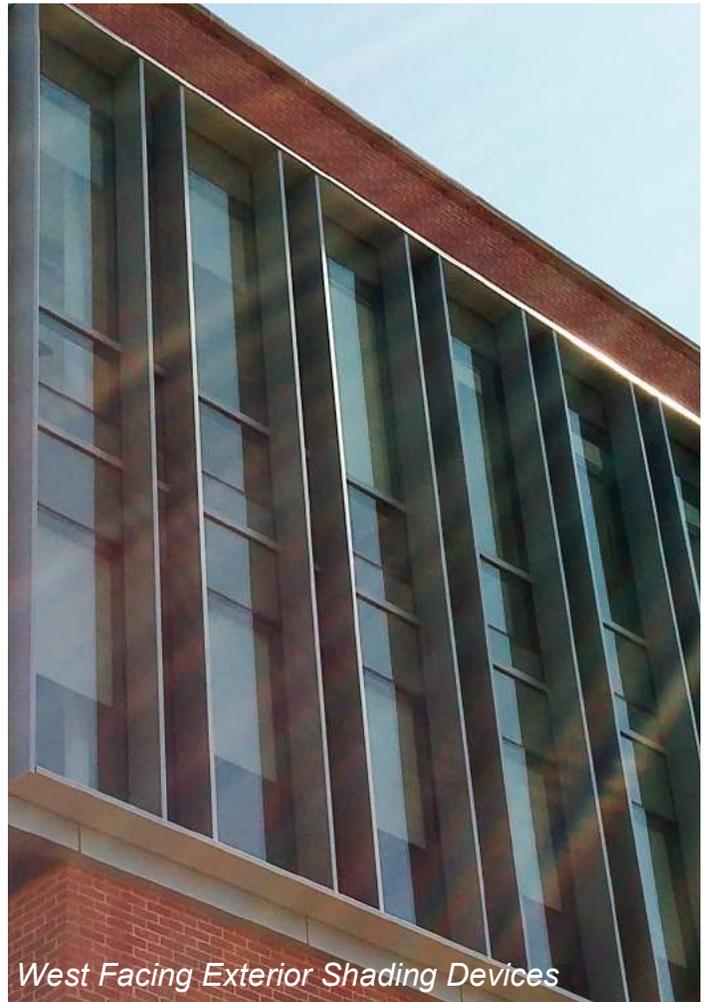
These windows utilize an integral locking bolt mechanism. To unlock, rotate the clasp on top of the window 90° until it stops and clicks. Then, lift up the window to the desired height. The internal mechanism will automatically release bolts into the side jambs and fix the window in place at predefined intervals.

Insect mesh screens are kept at half mast by default. Use the left and right sliders on the bottom bar of the screen to unlock the screen and adjust its height to the desired position. Pull the window down and return the clasp to its original position to close and lock.

# SHADING DEVICES - EXTERIOR

## What Are They?

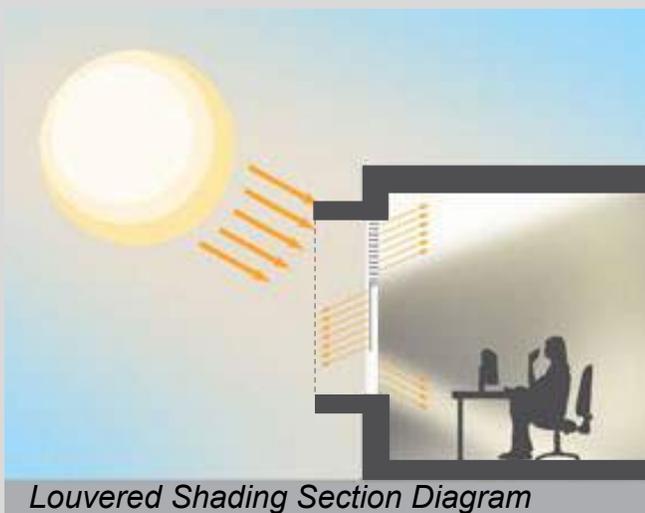
Due to the path of the sun, the south and west-facing sides of a building experience greater intensities of sunlight compared to the north and east. An exterior, aluminum louvered shading system on the south and west sides of South College maximize views and natural daylighting, whilst protecting the building against glare and high solar heat gain during the summer months. This translates to decreased building cooling loads, and increased net energy savings.



West Facing Exterior Shading Devices

## How Do They Work?

Exterior shading overhangs were carefully designed and dimensioned according to the building's solar orientation to control the flow of natural light into interior spaces, as shown below.



Louvered Shading Section Diagram

## What's My Part?

The exterior louvers are a fixed structural system designed for optimal shading and daylighting based on the building's solar orientation. **No action or adjustments are required by the user.**

# SHADING DEVICES - INTERIOR

## What Are They?

Classrooms and conference rooms are equipped with dual vertical roller shade systems to allow occupants full control over natural light exposure.

Spaces with dual shade systems integrate two different types of window coverings to provide both room darkening and ambient light control.



*Conference Room Dual Shade System*

## How Do They Work?

The outer solar screen shade is comprised of a perforated, UV-resistant material designed to protect interior spaces from direct sunlight and glare. The solar screen mediates exposure and filters natural light into spaces, while still allowing views to the outdoors.

The solid, inner blackout shade completely blocks out all daylight exposure. Use these shades when darkness and privacy are required for conferences and audiovisual (A/V) presentations.

*Flex Classroom (W245) Motorized Shades*



## What's My Part?

**Conference room shade systems are controlled manually.** Pull the hanging steel cord adjacent to the shade up or down to adjust its height for optimal daylighting.

**Some spaces, including the flex classroom (W245), W240, W241, E480, and E501 use motorized systems.** Use the up and down buttons on the wall control panel next to the shades to raise or lower them.

**During the summer months, utilize the solar screen shades** to reduce solar heat gain and building cooling loads.

**In the winter, take advantage of direct light exposure during the day** to naturally heat spaces. Draw the blackout shades before leaving for the day to prevent heat loss and reduce heating loads overnight.

# RECYCLING & TRASH

## What Is It?

Since 2001, the university has recycled all materials banned from disposal facilities by the [Massachusetts Department of Environmental Protection \(DEP\)](#).

South College utilizes single stream recycling, wherein paper, plastic, glass, and all other recyclable materials are consolidated into one waste stream. This method provides increased convenience for users over multi-stream recycling, and typically results in a higher total volume of collected recyclables.

After collection and storage onsite, materials are transported to a recycling plant where they are sorted and processed for reuse. Trash and recycling receptacles are located in all classrooms and administrative spaces, and interspersed throughout corridors and common areas. For more information about recycling at UMass, visit [www.umass.edu/recycle](http://www.umass.edu/recycle), or call the [Office of Waste Management](#) at (413) 545-9615.



Corridor Trash & Recycling Collection



## What's My Part?

Recycling is not only encouraged, it is the university's policy. Please remember to **dispose of all recyclable materials using the designated bins**, and **resist the urge to discard recyclable items in trash cans**.



First Floor Recycling Storage

# LIGHTING TYPES

## What Are They?

South College lighting is designed to provide adequate illumination levels consistent with the standards defined in the Illumination Engineering Society (IES) Handbook. Almost all interior light fixtures in the building utilize high efficiency, long lasting LED (light emitting diode) bulbs. T8 fluorescent fixtures are installed in some areas of the basement, while exterior post lighting uses metal halide bulbs.

Light fixtures were selected to enhance the building's unique aesthetics and architectural details. Lighting strategies are achieved through the careful selection of wall finishes and glazing, and the intentional placement of statement and accent lighting fixtures. Fixture types present throughout South College include recessed white LED downlights, linear LED accent lighting in corridors, illuminated exit signs for egress purposes, and RGB LED decorative shelf lights.



## How Do They Work?

South College lighting varies between automated and manual systems depending on the space use type. In larger public building spaces, lighting operates automatically based on preprogrammed schedules. In smaller rooms catered towards individual and small group use, lighting is controlled manually by occupants using wall switches.

## What's My Part?

Automated lighting schedules and [vacancy sensors](#) help to reduce the building's electricity consumption. [Light switches](#) and [thermostats](#) are controlled manually, and provide further opportunities for energy savings. **Choose your lighting levels consciously based on the task at hand and ask yourself, "how much light do I actually need?"**

# VACANCY SENSORS

## What Are They?

Ceiling mounted vacancy sensors are installed throughout South College. These devices detect when a particular space is in use, and adjust lighting and [HVAC systems](#) accordingly based on occupancy patterns. The vacancy sensors are tied to the [Johnson Controls Metasys™](#) Building Automation System (BAS), which allows the Physical Plant to monitor and control the building's systems remotely.

## How Do They Work?

Passive infrared (PIR) type vacancy sensors are installed in South College, and programmed to detect heat-based movement. This allows the system to accurately detect motion and assess activity levels at any given time. Physical [light switches](#) and [thermostats](#) are used to manually control lighting and thermal comfort in spaces. Together, these design strategies help to reduce the building's heating, cooling, and lighting loads by activating these systems only when needed.

When motion is continually detected by the vacancy sensor, artificial lighting will remain engaged, and the HVAC systems will ramp up to meet user demand. If a room is unoccupied for a prolonged period of time, the vacancy sensor will automatically shut off the lights, and set back heating and cooling levels to predetermined baseline temperatures.

## What's My Part?

In spaces with localized controls, lights must be manually turned on upon entering the room. The vacancy sensors are automatically triggered when lights are powered on, and will continually monitor the room for motion. After 30 minutes of inactivity, the vacancy sensor will turn off the lights.

Remember to ***stretch, get up, or walk around at regular intervals to ensure that your movements are detected by the vacancy sensor.*** If no motion is detected and your lights shut off, they must be manually turned on again using the dedicated wall switch. ***To save additional energy, please remember to manually shut off your lights.*** By doing this, you negate the 30 minute time delay for automatic shut off, and protect against false activation from movements near the door.



Vacancy Sensor

# LIGHTING CONTROLS

## *How Do They Work?*

Light switches are located on the walls next to room entrances and projection screens. Some units include dimming functionality, as shown below.

Press anywhere on the raised button to turn on the lights. Press and hold the top portion of the button to raise the artificial light level. Blue status lights beside the button will illuminate to reflect the light level. Press the button again to turn off the lights, or press and hold the bottom half to dim the lights.

LED light fixtures are installed and zoned according to room use type. In smaller rooms, such as offices and mail rooms, all light fixtures are controlled by a single switch.

Larger classrooms and conference spaces have multiple switches, each tied to a different zone of lighting. Experiment with switches and dimming controls to find the artificial light level which best suits your needs.



*Typical Dimmer Switch*

Blue status lights activate to indicate the room's artificial light level (dimming).

Press to turn on. Press and hold to increase room brightness. Double tap for full on lighting.

Press to turn off. Press and hold to decrease the light level.

***If you notice a light is malfunctioning or requires replacement, please call and report it to your Department Building Coordinator (see [I. Contacts](#))***

# LIGHTING CONTROLS

## What's My Part?

### Classrooms, Labs, Common Areas, and Circulation

Lighting operates on a preset, automated schedule programmed by the Physical Plant and controlled using a master lighting watt stopper panel housed in the basement. A variety of time schedules were determined according to specific space types and planned usage patterns. Some of these spaces contain additional wall-mounted light switches, which allow the user to manually override the preset lighting schedule.



### Offices and Conference Rooms

These spaces are equipped with localized, standalone lighting controls and [vacancy sensors](#). Artificial lighting is controlled manually by the occupant using a wall-mounted [dimmer switch](#), paired with a ceiling mounted vacancy sensor in the center of the room.



### Restrooms, Service and Utility

Service and utility spaces are controlled using occupancy sensors with automated lighting controls. Unlike the vacancy sensors, occupancy sensors will automatically turn artificial lighting on and off based on activity levels. No action is required by the user. The manual override controls provided for these spaces are standard on/off switches, without dimming control.

# A/V SYSTEM - CLASSROOMS

## What Is It?

South College features a fully integrated, state-of-the-art audiovisual (A/V) system for lectures, meetings, and presentations. The [flex classroom](#), described later in this section, is equipped with a touchscreen user interface. Regular classrooms use wall control panels with physical buttons (right).



*Extron Button A/V Control Panel*

## How Does It Work?

Extron A/V wall control panels are located adjacent to the projector screen, behind the classroom's main podium. The panel integrates all display, volume, lecture camera, and projector screen functions into a single unit for your convenience.

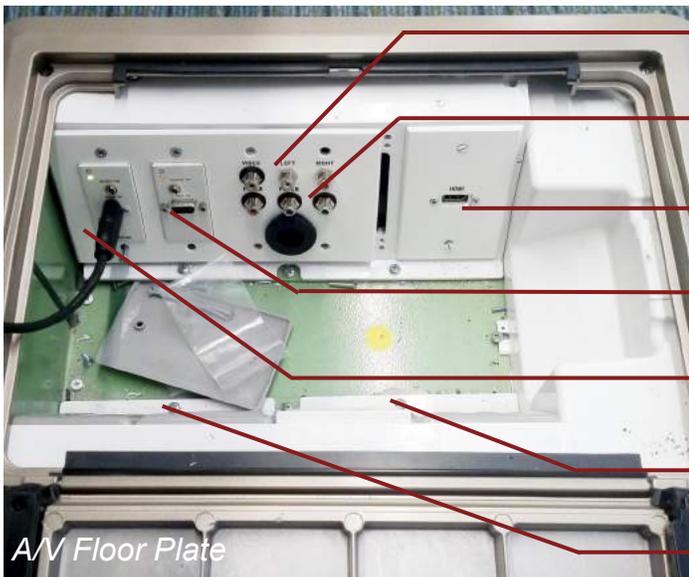
A/V plates are located in the floor and/or walls depending on the classroom, and house HDMI, VGA, RCA, component, and Ethernet inputs. Classrooms utilize a dual projector system ([see next page](#)). The white, Panasonic projector outputs 1080p and 4K resolutions at 30 frames per second (fps), and is suitable for everyday display applications (i.e. web browsing and lecture slides).

To connect to the Panasonic projector, power on the display by pressing the "on" button on the Extron panel. Use the white HDMI cable provided to connect the corresponding input on the A/V plate to your computer's HDMI output port and duplicate your computer's display on the projector screen.

Press and hold the screen up and screen down controls to adjust the projector screen height. Turn the volume knob to change the volume output to the room's speaker system. Note that some screen resolutions may appear differently on the projector when mirroring your computer's display. **Adjust your computer's display settings to find the resolution which best fits the projector screen.**

The black, Canon laser projector outputs a 4K display resolution at 60 fps. Use this projector for high-demand audiovisual needs, such as 4K audio and video streaming. To use the Canon laser projector, press the "on" button on the Extron panel. Connect the black HDMI cable installed in the A/V plate to your computer's HDMI output port. **Note that you will experience a brief, 30-45 second delay when switching between the two different projector systems. This is normal.**

# A/V SYSTEM - CLASSROOMS



Video, Left, & Right RCA Inputs

PR/CR, PR/CB, & Y Component Inputs

4K HDMI Input

VGA w/ Audio Input

1080p HDMI Input

Ethernet Ports (4)

Duplex Outlet

## What's My Part?

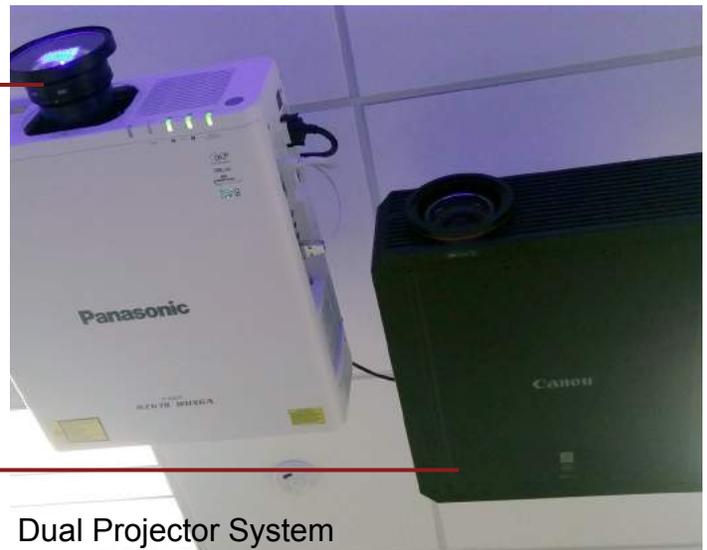
Please remember to **power off the projector** using the “off” button on the Extron A/V wall panel. Then, press and hold the “screen up” button and **return the projector screen to its original position before leaving the classroom.**

The audiovisual system will automatically reset itself to the preprogrammed default settings when the panel is re-activated.

For additional information and support regarding the Extron A/V system, call the [Classroom Technologies Center](#) (see [I. Contacts](#)).

**Panasonic Projector** - Outputs 1080p and 4K display resolutions at 30 fps. Suitable for everyday applications (i.e. web browsing and lecture slides).

**Canon Projector** - Outputs a 4K display resolution at 60 fps. Use for high-demand audiovisual needs (i.e. 4K audio and video streaming).



Dual Projector System

# A/V SYSTEM - FLEX CLASSROOM

## What Is It?

The second floor of South College contains a flex classroom (W245), which is designed to accommodate a wide variety of different course needs. The space is divided into three distinct audiovisual zones (east, center, and west), all controlled using the Extron A/V interface shown below.



*Extron Touchscreen A/V Control Panel*



*Extron Button/Touchscreen  
A/V Control Panel*

## How Does It Work?

The center zone features three large output displays, while the east and west each utilize a single display. The main Extron touchscreen A/V control panel is located on the wall behind the center podium, and will automatically turn on when motion is detected. If the panel does not activate, touch anywhere on the screen to wake up the system.

**The A/V system operates in two modes, individual and combined.** Select the “combined” mode to replicate a single source across all zones and displays. Connect a HDMI or VGA cable from the A/V floor plate (see previous page) to the corresponding output port on your computer. Use the Extron touchscreen control panel to select the input source on the left side of the screen. Then, select your audiovisual zone using the icons on the bottom of the screen.

Use the “individual” mode to control all three zones separately. In individual mode, the Extron touchscreen A/V panel (top left) controls the center zone, while the east and west zones are controlled by Extron combination button and touchscreen panels (bottom left) with A/V wall plate inputs. This allows up to three different input sources to operate simultaneously.

Speakers are integrated into the open ceiling system. Use the “audio control” panel on the right side of the touchscreen panel to increase, decrease, or mute the volume.

# A/V SYSTEM - FLEX CLASSROOM

## How Does It Work?

In addition to standard duplex outlets around the perimeter of the room, the flex classroom includes additional yellow power receptacles housed in the open ceiling system. A pole is stored in the classroom to operate these devices.

Reach up with the pole, grab the black hanging power cable, and pull down to the desired height. Gently pull down and release to retract the cable back into the ceiling system. ***Please return the pole to its original location before leaving the flex classroom.***



Flex Classroom Center Displays



Wall A/V Plate

## What's My Part?

Please remember to ***turn off the A/V equipment*** using the system off button on the Extron touchscreen. ***The system will automatically reset to its default programmed settings when reactivated.***

# A/V SYSTEM - CONFERENCE ROOMS

## How Does It Work?

Conference rooms are interspersed throughout the administrative floors of South College. The A/V system includes a large output display and lecture capture capabilities ([see next page](#)). Walls incorporate whiteboards for ease of graphical communication during meetings and presentations.

The system is controlled via an [Extron wall panel](#) with physical buttons. A/V input connections are routed from a floor plate to the conference table above, as shown at right. **Please review the beginning of this section for connection and operating procedures.**

## What's My Part?

Remember to **turn off the A/V equipment** using the “system off” button on the wall control panel before leaving the room.



Table A/V Input Connections



Northwest Administrative Conference Room

# A/V SYSTEM - LECTURE CAPTURE

## What Is It?

South College classrooms and meeting rooms are equipped a camera system to record live audio, video, and screen action from lectures, meetings, and presentations. Some spaces include multiple cameras depending on their size and use.



*Lecture Capture System*

## How Does It Work?

Your computer must be connected to the room's main audiovisual system in order to capture audio and video, as described at the [beginning of this section](#). Cameras are controlled via an external computer application.

Echo360 lecture capture technology allows instructors to record course content in spaces outfitted with Echo360 hardware, or on their desktop and laptop computers using the [Echo360 Personal Capture Software](#). Personal Capture allows you to record anytime and anywhere, with full control over the editing and publishing process. Students can view uploaded recordings through their [Moodle](#) or [Blackboard](#) courses.

## What's My Part?

Use Echo360 lecture capture to provide students with a “flipped” classroom experience, where content is delivered outside of class and the classroom becomes a place for active learning.

Echo360 allows students to review recorded lectures on-demand to help them study and prepare for exams. Use the system to record and upload your lectures to Moodle for easy student access.

**Visit the [UMass Information Technology website](#) to download the lecture capture software and familiarize yourself with its features. Review the [Echo360 Recordings Policy](#) and [FERPA Guidelines](#).**

# A/V EQUIPMENT BY ROOM TYPE

## What Is It?

The table below maps available audiovisual equipment to room number and type. Please use it as a resource when booking spaces for lectures, conferences, and other events.

To reserve a space, please contact your **Department Building Coordinator** (see [I. Contacts](#)).

Room Type	Room #	Extron Button Wall Control Panel	Extron Touchscreen Wall Control Panel	Floor Plate Input Connections	Wall Plate Input Connections	Lecture Capture Camera	Flat Panel Display Monitor	Projection Screen	Projection Screen Wall Control	1080p Display Projector	4K Display Projector	Ceiling Loudspeaker	Wall Loudspeaker	Assistive Listening Antenna
Classroom	W101						65" x 104"					6		
	W201						60" x 96"					6		
	W205						60" x 96"					6		
	W211						60" x 96"					6		
	W219						60" x 96"					6		
	E241						72-1/2" x 116"					12		
	E245					2	96" x 153-1/2"						2	
Flex Classroom	W245		3		3	70" (3), 90" (2)						29		
Computer Lab	E250						57-1/2" x 92"					4		
Computer Lab/Conference Room	E205						65" x 104"					10		
Conference Room	W301D						46"							
	E470							87" x 139"				8		
	E480							57-1/2" x 92"				4		
	E505						55"							
Conference/Seminar Room	W365						90"							
	W369						90"							
	E370							57-1/2" x 92"				6		
	W465						80"							
Seminar Room	E301						57-1/2" x 92"				4			
Tower Room	E501						57-1/2" x 92"					2		

# HVAC SYSTEMS OVERVIEW

## What Is It?

South College contains a variety of heating, ventilation, and air conditioning (HVAC) systems. Together, they manage the intake, conditioning, delivery, and exhaustion of air, providing thermal comfort and natural ventilation for occupants.

## How Does It Work?

Fresh intake air is collected by the rooftop [dedicated outdoor air system \(DOAS\)](#), and conditioned to preset interior temperatures using a [fan coil unit \(FCU\) system](#).

Conditioned air is delivered to interior spaces through a combination of [ceiling supply diffuser registers](#), [perimeter wall radiators](#), and [perimeter fin tube wall radiator units](#).

Dedicated return registers housed in the ceiling collect heated air for reconditioning. A second rooftop unit manages this exhaust air, and reconditions it for delivery to interior spaces. The system expels exhaust air while conditioning incoming fresh air received from the [dedicated outdoor air system \(DOAS\)](#), leading to increased energy efficiency.

HVAC systems are remotely controlled and monitored in real time by the Physical Plant, using the [Johnson Controls Metasys™](#) Building Automation System (BAS).



First Floor Mechanical Room

## What's My Part?

Please review this section in its entirety to familiarize yourself with the various HVAC systems. **Pay special attention to the system(s) present in your office, and consult this information as a primary resource when troubleshooting.** If you continue to experience issues with units or controls, contact your Building Coordinator (see [I. Contacts](#)).

# DEDICATED OUTDOOR AIR SYSTEM

## What Is It?

In addition to the [fan coil unit \(FCU\)](#) system described in the next section, the dedicated outdoor air system (DOAS) supplies fresh air and removes exhaust air from interior spaces. Perimeter classrooms, offices, and common areas include ceiling registers for natural ventilation.

This ventilation method has several benefits, including low operational costs, a 10-30% annual reduction in building cooling loads, and increased indoor environmental air quality for occupants.

## What's My Part?

***This system functions automatically.*** The Building Automation System monitors indoor and outdoor temperatures and adjusts air intake and exhaust rates accordingly to regulate indoor temperature and air flow.



*DOAS Ceiling Register*

## How Does It Work?

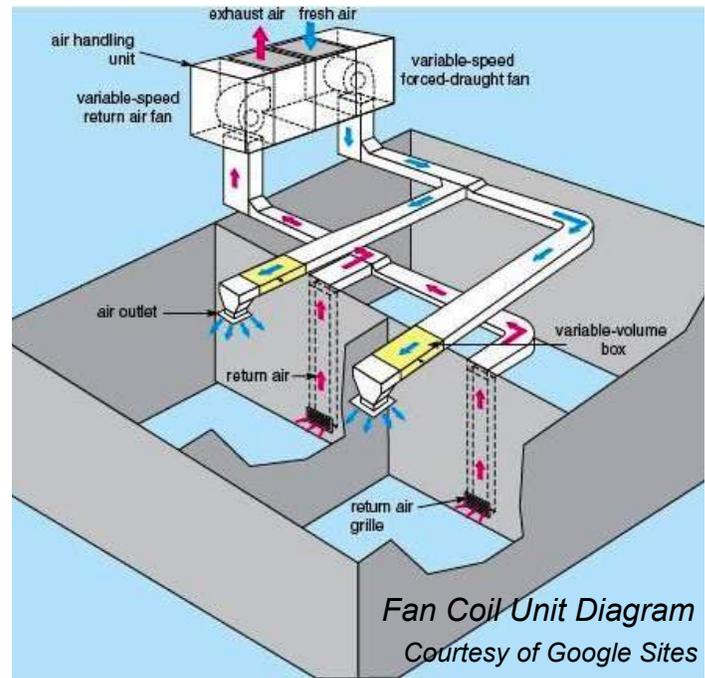
Two rooftop units manage the intake and delivery of fresh air to interior spaces. One unit handles recirculated air, while the other contains the DOAS. Using a heat wheel system, supply air is conditioned to a preset temperature and distributed throughout the entire building to satisfy occupant demand for fresh air.

Differences in temperature and pressure between the building's interior and exterior environment create buoyancy-driven ventilation. Supply air warms and rises as it travels through the building. Heated air is directed to a series of ceiling return registers, and expelled from the building. This phenomenon is commonly referred to as the stack effect.

# FAN COIL UNIT (FCU) SYSTEM

## What Is It?

A fan coil unit (FCU) is a heating and cooling delivery system comprised of a fan and heat exchanging coil. These units work in conjunction with the [dedicated outdoor air system \(DOAS\)](#), [ceiling supply and return registers](#), [perimeter wall radiators](#), and [perimeter fin tube radiators](#) to manage the conditioning and delivery of fresh air to interior spaces.



## How Do They Work?

A fan coil unit uses water as the primary medium for heating and cooling. The system sources water from the [W.E.B. DuBois Library](#), which acts as a regional chiller plant for South College and the [Old Chapel](#). Water is circulated through a heat exchanging coil to heat and cool interior spaces. Due to its high specific heat, water maintains its temperature for a longer period of time compared to air, providing maximum efficiency during heat exchanging processes.

South College uses a four-pipe FCU system, with two supply and two return pipes. This configuration allows for heating and cooling of different spaces simultaneously. Fan coil units are controlled by [thermostats](#), which regulate the flow of water to the heat exchanger via a control valve and alternating fan speed.

## What's My Part?

The HVAC system will automatically determine whether your room needs to be heated or cooled using the same [vacancy sensors](#) tied to the lighting system. If you are absent from your room and feel warm or cold when you return, ***please give the system time to reach its set point before manually adjusting your thermostat.*** Doing so puts less demand on the heating system and contributes to energy savings.

# PERIMETER WALL RADIATORS

## *What Are They?*

Perimeter wall radiator units supply both heating and cooling to perimeter offices located in the original section of South College **only**. They are located on the exterior walls beneath windows.

## *What's My Part?*

Each wall radiator unit operates independently on its own FCU system. If your office contains a perimeter wall radiator unit, you have complete control over the heating and cooling temperatures for your space. For more information, see [Thermostat Locations and Zones](#).



*Perimeter Wall Radiator*

# PERIMETER FIN TUBE RADIATORS

## What's My Part?

Multiple offices with perimeter fin tube radiators are grouped together on a single FCU system. The temperature of your office is dependent on all of the offices in your zone. The FCU calculates the supply air temperature for your office based on the average set points of all thermostats in each zone (see [Thermostat System](#)). First, use the [thermostat maps](#) to identify your office and zone. Then, **coordinate with the surrounding offices in your zone to ensure optimal comfort and energy use.**

## What Are They?

Perimeter spaces added as part of the 2017 addition contain fin tube baseboard radiators for heating, located at the exterior walls. Cooling needs are handled separately by dedicated [ceiling supply and return registers](#).



Perimeter Fin Tube Baseboard Radiator

# CEILING ZONED FAN COIL UNITS

## What Are They?

Four-pipe ceiling [fan coil units \(FCU\)](#) work in conjunction with the [dedicated outdoor air system \(DOAS\)](#) to provide both heating and cooling to core offices facing into the atrium commons. These spaces are conditioned via [thermostats](#) with dedicated supply and return ceiling registers. Supply registers deliver fresh, conditioned air to interior spaces, while return registers collect heated air for reconditioning or exhaustion using a dedicated rooftop unit.

Ceiling zoned fan coil units are located in Old South College interior offices facing into the atrium commons, and all new spaces added as part of the 2017 addition. The inner ring of offices surrounding the central atrium are better insulated from the exterior compared to the perimeter offices, and thus experience less heat loss. These offices obtain both heating and cooling from the overhead ceiling registers, without requiring any additional wall units.

## What's My Part?

Offices with ceiling zoned fan coil units operate on shared heating and cooling zones. Groups of three to four interior offices share one FCU system. The temperature of your office is dependent on all of the offices in your zone. The FCU calculates the supply air temperature based on the average set points of all thermostats in each zone (see [Thermostat System](#)). First, use the [thermostat maps](#) to identify your office and zone. Then, **coordinate with the surrounding offices in your zone to ensure optimal comfort and energy use.**



Ceiling Fan Coil Unit Register

# THERMOSTAT SYSTEM

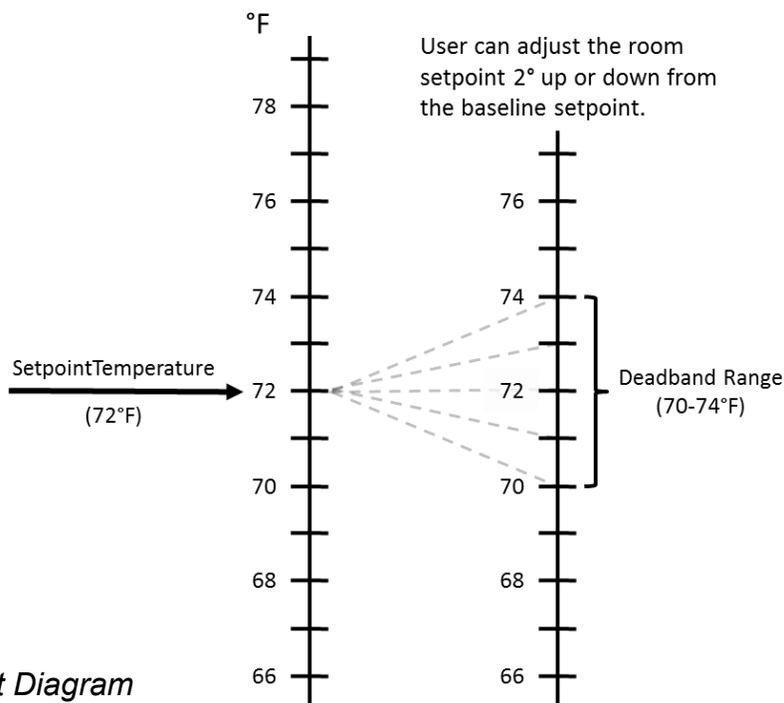
## What Is It?

South College features Johnson Controls thermostats which correspond to specific heating and cooling zones (see [Thermostat Locations & Zones](#)).

## How Does It Work?

Thermostats operate based on a predefined baseline, or **set point** temperature (typically 72°F). Room temperatures can deviate up to 2°F from the set point temperature in either direction before heating or cooling systems are triggered. In the example pictured at right, the room temperature is allowed to fluctuate between 70 and 74°F before external systems are activated. This 4° temperature range is referred to as the **deadband**.

Occupants can adjust the set point temperature up or down by 2° using the dial on the device. Adjusting the set point temperature changes the deadband range accordingly. For example, lowering the set point to 70°F produces a deadband range of 68 to 72°F. Raising the set point to 74°F results in a deadband range of 72 to 76°F. Using an assigned set point allows the room temperature to fluctuate independently within the deadband, resulting in energy savings.



Thermostat Set Point Diagram

# THERMOSTAT SYSTEM

## What's My Part?

**You have control to set the temperature of thermostats within preset, monitored parameters;** typically up or down by 2°F. All rooms are set to 72°F by default. It is best to find a comfortable temperature within a few degrees of 72 and leave the controls alone.

If you are not immediately comfortable when you arrive at your office, **please give the system time to reach its set point before manually adjusting your thermostat.** If you believe the system is malfunctioning after this adjustment period, please contact your Building Coordinator (see [I. Contacts](#)).

Normally displays the current room temperature by default. Rotate the adjustment knob to display the set point (target) temperature.

Press to change the temperature display units between Fahrenheit imperial units (default), and Celsius metric units.

Rotate the knob to adjust room temperature. Turn clockwise to increase the temperature, and counterclockwise to decrease.



Johnson Controls Thermostat

# THERMOSTAT LOCATIONS & ZONES

## What Are They?

The following floor plans denote thermostat locations and shared heating and cooling zones. Each group of offices that share a zone is indicated by a red outline. The BAS automatically calculates the average temperature of all thermostats in each zone to determine the supply air temperature.

**Please coordinate with the surrounding offices in your zone to ensure optimal comfort and energy use.**

## Plan Key

	= Thermostat
	= Shared Thermostat Zone
	= Common Areas & Circulation
	= Classrooms & Curriculum
	= Computer Laboratories
	= Conference & Seminar Rooms
	= Offices
	= Restrooms
	= Service & Utility



2nd Floor Plan

# THERMOSTAT LOCATIONS & ZONES

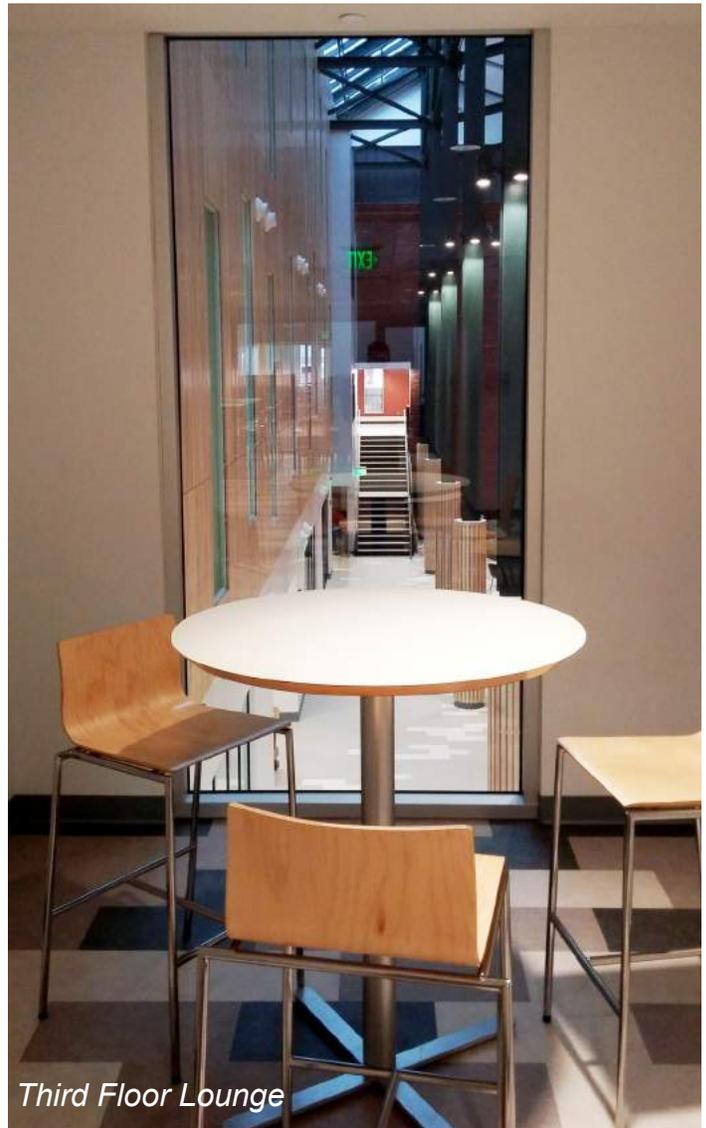
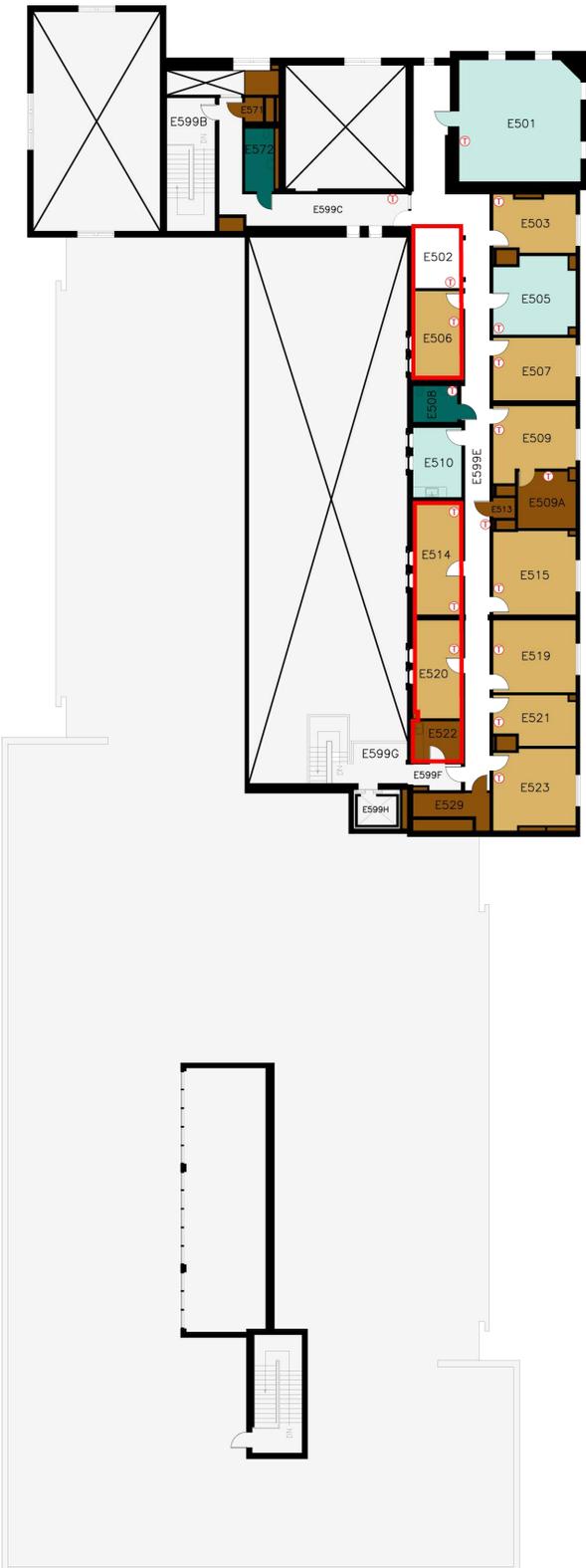


3rd Floor Plan



4th Floor Plan

# THERMOSTAT LOCATIONS & ZONES



*Third Floor Lounge*



*Second Floor Classroom Corridor*

*5th Floor Plan*

# RESTROOMS & SHOWER FACILITIES

## What Are They?

South College restroom facilities are designed to be inclusive and welcoming spaces which are both physically accessible ([ADA](#) compliant), and open to people of any gender. The first floor west wing contains four shower and changing facilities for staff and faculty who bike to work.



*Right-hand Accessible Restroom*



*First Floor Shower & Changing Facilities*

## How Do They Work?

Unisex restrooms ensure that facilities are fully accessible to all members of society. **Signage for these bathrooms is visibly identified with open, inclusive language, and lacks gender designation.** Placards denote right and left hand approach routes for physically impaired users, and include braille translations for the visually-impaired.

## What's My Part?

Please be aware of ongoing building signage efforts to increase accessibility, and **respect the gender neutral restroom policy.**

# LOW-FLOW TOILETS

## What Are They?

In 1997, Massachusetts became the first state to mandate low-flow toilets for all commercial renovations and new construction projects. South College is outfitted with wall-hung, vitreous china, elongated bowl, siphon jet toilets with integral flush sensors.

Low-flow toilets use just 1.28 gallons of water per flush (GPF). This helps to reduce water consumption and conserve resources compared to conventional 1.6 GPF toilets, and older models rated at 3.5 GPF. Restroom facilities are also equipped with low-flow urinals.

## How Do They Work?



*Low-Flow Toilet*

Modern toilets require less water than conventional models to assist the siphon gravity flush system. Low-flow toilets use pressurized air to force water into the bowl, ensuring that they effectively clear waste with a single flush, and use less water.

An infrared sensor on the fixture controls the auto-flush function based on the amount of time the sensor is activated. **Physical buttons should be used strictly for override purposes, in the event that the auto-flush mechanism malfunctions.**



## What's My Part?

Be aware of the role you can play every day to support sustainable practices. During bathroom breaks, contribute to efficiency in your routines and **save water by relying on the auto-flush function, rather than pushing the physical button out of habit.**

# FIRE ALARM SYSTEM

## What Is It?

South College is equipped with an addressable fire alarm system manufactured by SimplexGrinnell™. It includes a control and voice communications panel which allows the Fire Department to operate the system remotely.

The building's fire alarm system is monitored 24/7 by the campus central station. It is equipped with voice notification for all spaces, and includes duct-mounted smoke detectors, heat and smoke detectors, manual pull stations, and combination speaker/strobe alarm units.

The entire building is also protected by a sprinkler system, which helps to contain smoke and flames during an emergency.



*Fire Alarm with Integral Strobe*

## How Does It Work?

An onboard Ethernet port provides fast external communications to expedite alarm system installation and service activities. In addition, the InfoAlarm Command Center panel provides options for convenient expanded display content.

All spaces include addressable smoke alarms with combination speaker/strobe units interconnected with the entire facility. Activation of the smoke alarm in an individual zone will automatically trigger the whole building system and relay a signal to the public safety office.

## What's My Part?

***This system is run by appointed operators.*** It has a user-friendly interface that is easily accessible for those who update and maintain it. ***Never tamper with the fire alarm system unless there is an emergency.***

Always be aware of your surroundings. Familiarize yourself with all building emergency exits and egress stairwell locations. ***In the event of an emergency, use the nearest exit to get yourself out of the building quickly and safely.***

If you have any additional questions regarding fire alarms, egress maps, or life safety, please visit the Environmental Health & Safety website at <http://ehs.umass.edu>, or call (413) 545-2682.

# EGRESS MAPS

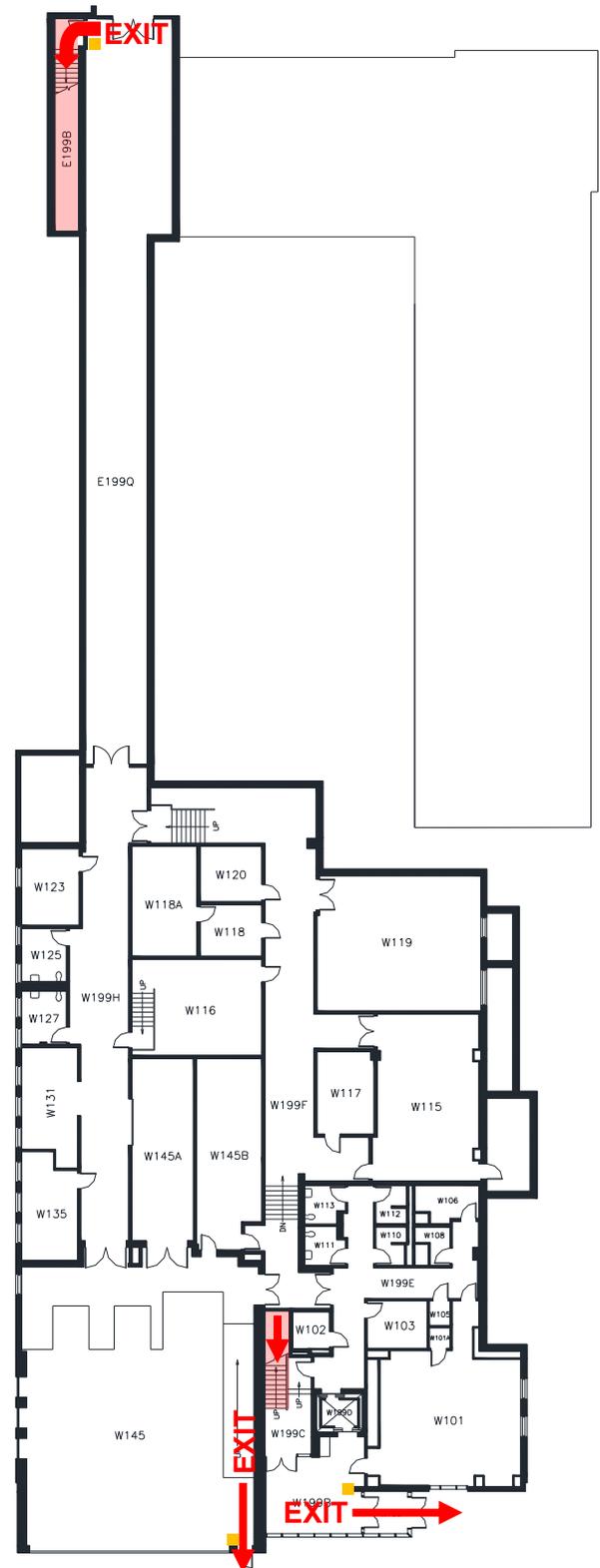
## What Are They?

The following egress maps are laid out floor by floor for reference. Please **familiarize yourself with all egress stairwell and exit locations**. In the event of an emergency, **avoid elevators**.

Use the highlighted stair shaft and exit closest to you to **get yourself out of the building quickly and safely**. **Call 911, and wait outside at a designated emergency accountability area for the emergency response team to arrive.**

## Plan Key

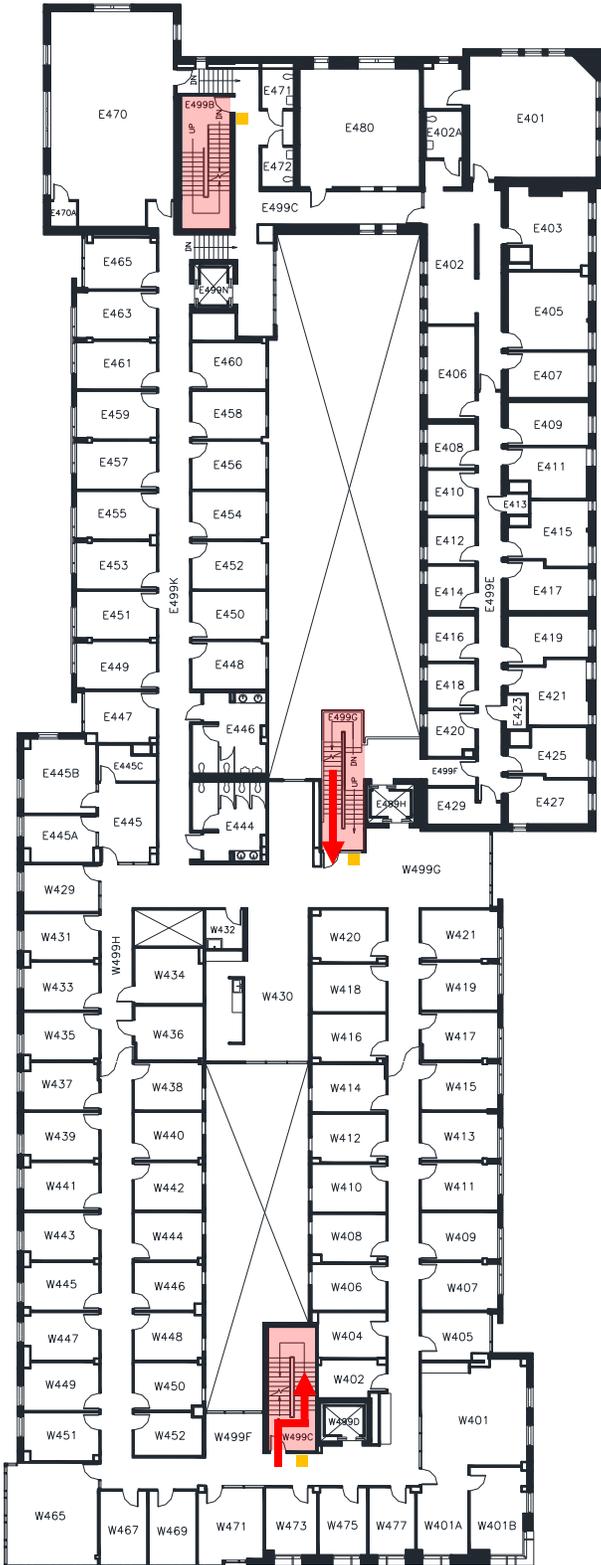
	= Exit
	= Egress Stairwell
	= Fire Alarm Pull Station
	= <a href="#">Won-Door FireGuard</a>
	= Emergency Accountability Area



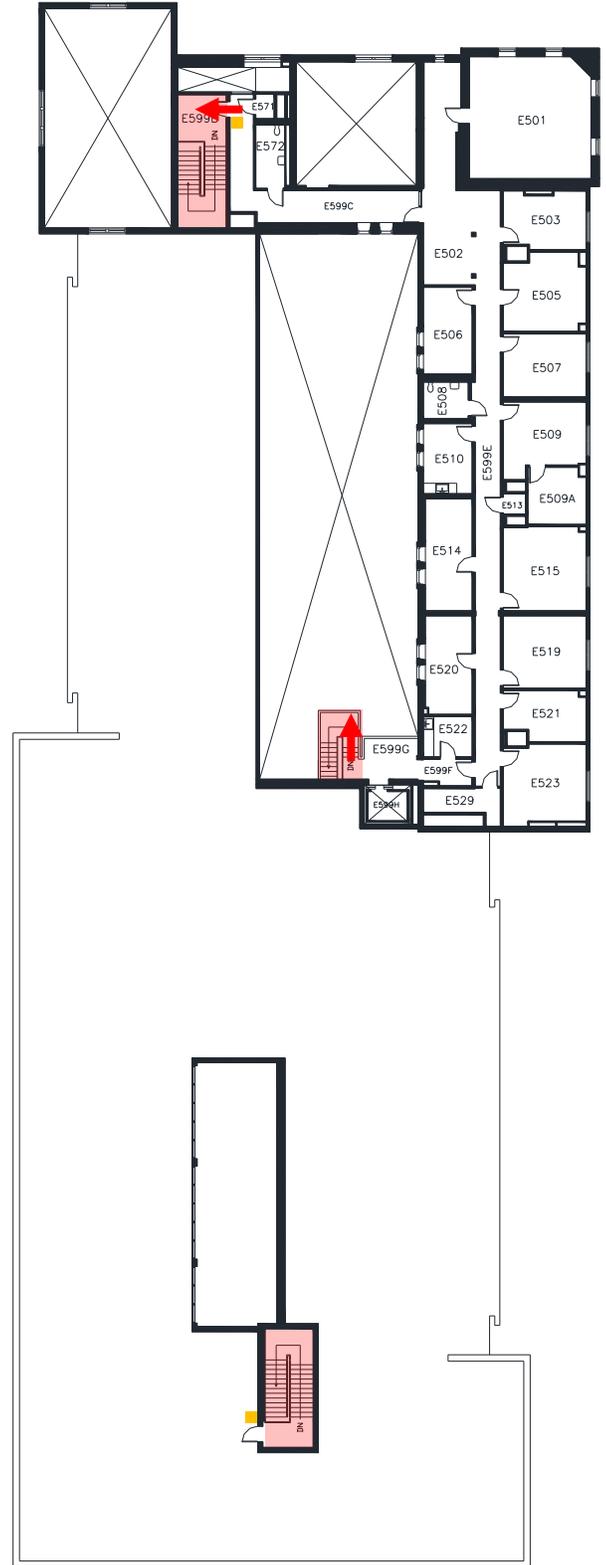
1st Floor Plan



# EGRESS MAPS



4th Floor Plan



5th Floor Plan

# CLOCK SYSTEM

## What Is It?

The UMass campus utilizes a wireless master clock system with a Visiplex™ transmitter to support all clocks installed in South College. Clocks are located throughout the building and are compatible with the existing infrastructure.



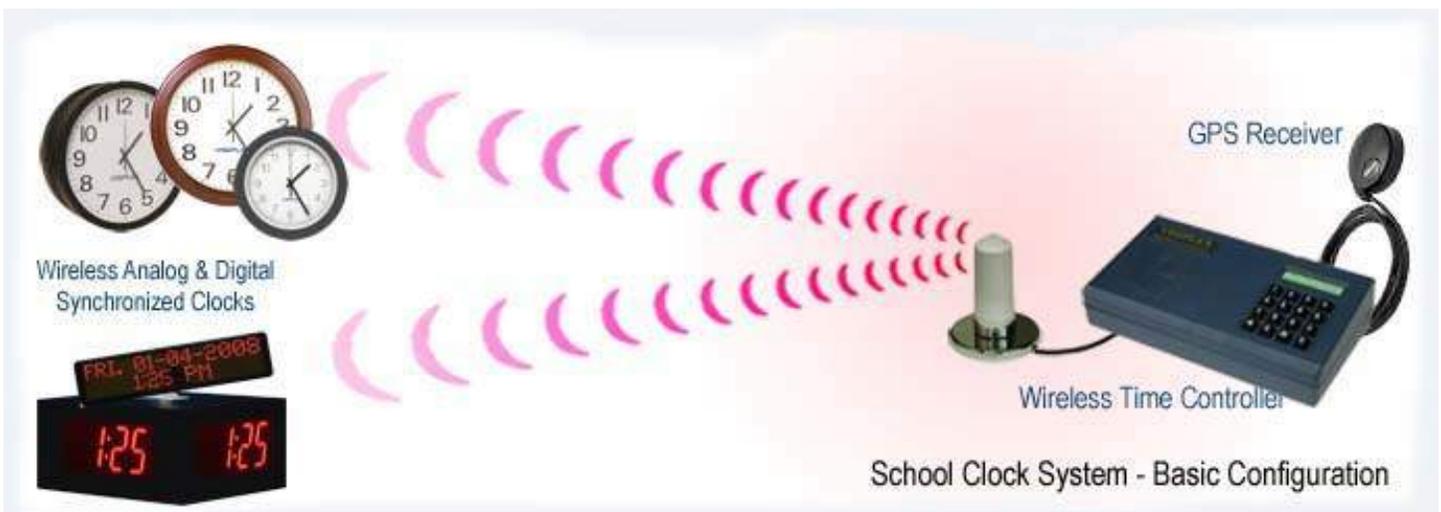
Standard Wall Clock  
Courtesy of Visiplex™

## What's My Part?

All clocks will reset and update automatically per the system settings. **Please trust the time displayed and do not attempt to adjust the clocks manually.** If the time shown is incorrect, please contact your Building Coordinator for assistance (see [I. Contacts](#)).

## How Does It Work?

The Visiplex system uses a radio transmitter to send accurate time information to synchronize all of the university's clocks, bells, etc. In the event of an emergency, this system will also broadcast voice notifications and alerts across the entire campus.



Visiplex Wireless Clock System  
Courtesy of Visiplex

# MATERIALS & FINISHES - EXTERIOR

## BRICK

Red brick was carefully selected to match the original South College exterior as closely as possible. Horizontal accent bands vary slightly in color to reflect the existing building.



*Brick Exterior*

## SLATE



*Dutch Lap Slate Siding*

Textured grey slate tiles create a visual break in the brickwork between Old South College and the contemporary addition. The staggered siding pattern complements the horizontal rhythm of the brick, while reinforcing this distinction between the old and the new. This overlaid, “Dutch lap” siding technique uses less material compared to other methods.

## LONG BOARD

A photorealistic texture is superimposed onto steel to create the illusion of wood paneling. This allows for a seamless material transition between the building’s interior and exterior, without compromising durability.



*West Entry Long Board*

# MATERIALS & FINISHES - INTERIOR

## TILE FLOORING

Porcelain tile flooring is installed in an alternating strip pattern throughout high-traffic pedestrian spaces including common areas, main corridors, and restrooms. The tile is made of a highly durable material which will withstand many years of heavy wear, with minimal maintenance required.



*East Entry Tiled Common Area*

## CARPET

Classrooms, offices, and conference rooms are furnished with durable, high-traffic [Flotex™](#) carpeting by [Forbo](#). During production, carpet fibers are impregnated onto a thin, rubberized sheet material and colored with a permanent design. Other spaces use dye loop carpeting, pre-manufactured in squares for ease of installation. Subtle variations in carpet color complement wall finishes, while the dark shade masks dirt and stains. Both systems wick moisture, and are maintained using commercial carpet cleaners.



*Carpeted Classroom*

## VINYL

Resilient vinyl flooring is installed throughout corridors of the Old South College portion of the building. A photorealistic wood texture is superimposed onto the vinyl sheet material to create a durable surface which references the original wood floors of Old South College.



*Old South College Vinyl Flooring*

# MATERIALS & FINISHES - INTERIOR

## BRICK

The central atrium preserves all of the original exterior brickwork from Old South College. Bricks were removed where necessary to create new door and window openings, and reused to infill other areas where solid wall was desired.



## ACOUSTIC PANELING

The second floor atrium and corridor walls are outfitted with vertical maple paneling to provide sound attenuation for the surrounding classrooms and offices. Wood slats are adhered to a layer of grey surface felt, and anchored to walls insulated with ROCKWOOL sound batts. The change in material from brick to wood also signals the transition from Old South College to the modern addition.



## PAINTED WOOD TRIM

Painted interior wood trim is installed around windows, doors, and ceilings in the original portion of South College to create a comforting, residential-style interior reminiscent of the late 1800s.



# PANTRIES

## What Are They?

Faculty and staff pantries are located intermittently throughout office corridors. Each includes a fully equipped kitchen with an adjacent common seating area.

Pantries provide a relaxing space removed from offices and conference rooms where people can gather for breaks, informal meetings, and other social events.

These common areas promote an open, collaborative environment which brings together students, faculty, and staff across the College of Humanities and Fine Arts.

## What's My Part?

Remember that pantries are a shared community resource which all occupants have the freedom to use. ***Please treat them with respect, and clean up after yourself.*** When others are using the space for work or studying, please be considerate and limit the volume of your conversations accordingly.

If you notice any kitchen fixtures or appliances are broken or malfunctioning, ***please report them to your Building Coordinator, and [submit a work order](#)*** (see [I. Contacts](#)).



Pantry Kitchen Area



Common Seating Area



Pantry Kitchen Area

# GREEN OFFICE PROGRAM

## What Is It?

The [UMass Green Office Program](#) facilitates energy and waste reduction practices to encourage sustainable office behaviors and operations across the campus.



Green Office Program Plaque

## What's My Part?

Take the initiative to incorporate sustainable practices in your office. [Click here to access a step-by-step guide to the Green Office Program, and get started today!](#)



Green Office Program Certificate

## How Does It Work?

Offices that choose to participate in the program work to satisfy sustainable requirements based on a four-level scale: bronze, silver, gold, and green. Each tier is defined by four subcategories: energy, waste and recycling, kitchens, and purchasing. Together, these divisions promote sustainable office behaviors and activities. Completion of the program occurs once an office has met the criteria for the "green" level.

The UMass Sustainability Fellows work individually with each office to develop a plan tailored to meet the office's needs. The system encourages friendly competition between offices to see who can achieve green certification first. Recognition is awarded for every level completed with a congratulatory certificate. Scoring criteria for version 2.0 (launched in February 2013) are as follows:

- Bronze: 8+
- Silver: 12+
- Gold: 16+
- Green:

To learn more, please [visit the Green Office Program website](#), or [email the program team](#).



# SOUTH COLLEGE

## BUILDING USER MANUAL



*Southwest Exterior Perspective*

For additional information regarding building systems and operations, please call the [Facilities & Campus Services Solutions Center](#) at (413) 545-6401.

Facilities &  
Campus Services



*We're here to help.*



\*LEED Gold certification anticipated