A. PURPOSE

The purpose of this compliance standard is to describe the minimum technology standards for the design and layout for new and existing classrooms.

B. DEFINITIONS

Classroom Central is the organizational unit within OCCS that manages technology classrooms and provides classroom equipment.

Master PROX key is a proximity key with encoding that will access all many classroom doors. This key is used only in emergencies and is kept in a secure location.

OCCS is the acronym for the official name of the Office of Computing and Communications Services.

Proximity card is the generic name for contactless integrated circuit devices used for door access. At ODU, faculty and staff identification cards may be encoded to permit authorized access to classrooms.

Proximity door lock is a device that secures classroom doors and permits access through the use of radio-frequency identification (RFID) card reader.

C. STANDARDS STATEMENT

Classroom Central provides equipment, services, and support to help faculty and students take full advantage of the technology available in the University's technology classrooms and is responsible for ensuring that classrooms meet minimum standards.
General Principles

- Technology classrooms should be flexible to serve multiple users with many teaching styles and broad academic spectrum.
- The design should provide easy flow and mobility for students and teacher as well as their interaction.
- The design should provide for connectivity and networking for data, voice, and video information.
- Educational technology systems should be user friendly and easily operated by a teacher without the assistance of a technician.
- The design should be closely coordinated with lighting and mechanical systems.
- The design should contain cost without sacrificing quality.

Space Requirements

- Facilities Management must approve any space renovations that include any structural, electrical or HVAC work. Approval must be received before any work can be started.
- All work must be performed by license contractor(s) for the type of work being performed.
- Plans, drawings, and written explanation of changes/additions are to be provided by the contractor to the project manager at least 4 weeks prior to start date.

Room Layout Specifications

- For most technology classrooms the following layout design guidelines apply. Specific design issues will vary based on a wide variety of factors including: application, available facilities, intended purpose of space and cost.
- Whenever possible, the instructors’ desk should be positioned on the diagonal from classroom door. This allows for students to enter and exit the classroom without disrupting the lecture.
- When designing classroom seating, a center aisle is preferable to allow for the use of a portable overhead transparency projector.
- Classroom windows should have closable shades.

Electrical Computer and Network Specifications

- Ceiling flush-mounted dual 110v electrical outlets, located 14’-16’ from the projector screen with a 4’ whip above the ceiling, are required to power the overhead projector.
- Electrical outlets must be on the same phase as the outlets on the instructor’s desk.
- Most projectors require 20 amps requiring electrical outlets to be on a dedicated circuit.
- The instructor’s desk location requires three network jacks and an 110v 20amp power outlet.
- A telephone wall jack mount, installed at the standard light switch height of 48 inches above the floor near the instructor desk, is required for a telephone.

Door Security Specifications

- All new classrooms are equipped with a wired proximity door lock.
- The override key is the OCCS Master PROX key.

Lighting Specifications
- Classroom lighting is to be designed to allow the instructor to turn off the lights in banks.
- The first bank of lights are to be the row of light closest to the projection screen.
- Light switches are to be located near the instructor’s desk and at the classroom door.
- Flush-mounted lights are preferred over drop down lights as drop down lights block the projected image from the projector.
- If drop down lights are the only option, lights are to be installed so that they do not interfere with the projector line of sight to the screen.

**Screen Specifications**

Screen location depends on the room size, location of seating, and ceiling height.

- An appropriate sized projection screen will be located in the room based on room layout and will allow for each seat to have a clear, unobstructed view of the projected image. The screen size will be determined so that the bottom of the screen will not exceed the tray of the marker board.
- Manual pull down screens are the standard for rooms that seat 60 or less.
- For large rooms of 60 or more and lecture halls, an electric screen is the standard.
- Screens are installed below the ceiling with no impact on ceiling design whenever possible allowing for life cycle replacement to occur without a replacement of ceiling tiles.
- Screens are centered on the front wall whenever possible.
- Whiteboards are to be installed to allow use if the screen is in the down position whenever possible.

**Equipment Specifications**

- All equipment should provide the best possible image quality for both analog and digital content, or computer or other sources.
- Ceiling mounted projectors with remote control devices are to be used whenever possible.
- All installation should include front-or ceiling-mounted speakers and a rack for audio and video equipment with connectivity to projector from a panel.
- Projector rating for any classroom is to be no less than 5000 ANSI Lumens with a corresponding increase with larger classroom layouts.
- Portable projectors are to be a minimum of 4000 ANSI Lumens.
- Program audio amplification is typically required in any room with computer and video projection. The power, size, and number of speakers depend largely on the size and acoustics of the space.
- All equipment is stored in desk; the computer is located on the side of the desk closest to exterior wall.

**Furniture Specifications**

- Instructor’s desk/podium is provided through the Office of Computing and Communications Service’s authorized contractor and is designed for all media equipment, including the computer. No other space is required for equipment. Large lecture halls may be an exception.
- All audio/visual equipment is housed within the instructor’s desk.
- Classrooms with less than 60 seats should include a podium capable of providing connectivity to the network, power, and audio/video devices.
- Classrooms with more than 60 seats should include a podium capable of providing connectivity to the network, power and audio/video devices, sound systems and other room peripherals.

D. PROCEDURES, GUIDELINES & OTHER RELATED INFORMATION

Classroom Central

E. HISTORY

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