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**INSTRUCTIONAL AREAS: VIDEO TELECONFERENCING
CLASSROOM**

VI Room Type

Varies Sq. Ft.

DESCRIPTION

Video Teleconferencing Classroom (VTC)

INTENDED USE

This room will support use of interactive video for teaching and learning. Room systems will produce origination of audio and video for two-way communication. Control systems will be sufficiently user friendly to enable operation by the instructor or an assistant. Professional staff will not be required to operate the systems. The classroom system will capture live video of all participants in the room, as well as transmit video sources such as document camera, scan converted computer video, VCR playback and record, and cable TV. Microphone pickup will allow participation by all people in the classroom. Local audio will have a mute function.

Display systems will allow users to see both outgoing video signals, local display from document camera, etc., and video signals from remote sites. Multi-point sessions will display voice activated signals from remote sites.

Network connections will be both pre-programmed through central scheduling systems and manually managed from the room. Room systems will be permanently installed, and all user equipment will be available with minimum setup. Room setup can be accomplished in less than 15 minutes, with the work being performed by non-professional staff.

SPECIAL ROOM REQUIREMENTS

Architectural

- Distance from cameras to people needs to allow good camera angle (minimum 10')
- Rectangular rooms are better than square
- Allow 35 square feet per person
- Use neutral colors for walls
- Use solid, neutral colors for table surfaces (avoid white and wood grain)
- Use non-reflective, uniform texture, non-pattern backdrops
- Avoid dark backgrounds and wood paneling
- Avoid reflective objects (glass, mirrors, whiteboards) in the camera field of view
- No outside windows

**MODEL CLASSROOM DESCRIPTIONS AND REQUIREMENTS
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Lighting

- Use 4100 degree K color corrected temperature fluorescent bulbs
- Lighting should provide proper color balance for video
- 75-100 footcandles light intensity (750 to 1,100 lux)
- Provide even lighting, 3 ft ahead and above participants
- Use light lenses to avoid shadows
- Pay special attention to teaching areas for proper lighting
- Avoid windows, use drapes when necessary
- Lighting control - zone from front to back when appropriate

Other Electrical

- Provide adequate electrical outlets
- Provide dedicated circuit for videoconferencing system

Acoustics

- Provide microphone placement so that all participants can be heard
- Desktop, gated microphones are recommended
- Ceiling mounted microphones are not recommended
- Use drapes, acoustic ceiling tile, and acoustic wall treatments
- Use anti-static wall-to-wall carpeting

Telecommunications requirements

- Additional voice outlets as needed (telephone, fax)
- Minimum 2 switched, 10/100mb data outlets (one for IP-based codec; one for installed PC/MAC)

EQUIPMENT REQUIREMENTS

- CODEC and control system
- Camera(s)
- Microphones
- TV monitors
- Document camera
- VCR with TV tuner
- Computer video scan converter (NTSC)
- Auxiliary equipment cart
- Furniture choices should be fixed student tables
- Chairs for use at student tables

LOCATION

Avoid noisy, busy traffic areas, work areas, and offices. Location must be secured during non-use.