**JMMC Campus H - Classrooms Scope of Work Outline**

The following information specifies needs for each classroom at the CNM JMMC Campus H-Building.

The total numbers of classrooms is 25 and are indicated as follows:


The following items will need to be purchased and will be the components used for the classroom installs:

Hitachi CP-X4021N Data Projector Ceiling mounted (*22 units to be purchased - 3 were previously purchased in spring of 2011 and will be used for this project*)

BMS LCD LOC-IV One (1) Data Projector Ceiling Mount Size = 14.4” x 12.2” x 18.1” (W x D x H)

- Uses 1.5” pipe
- Weight capacity – 150 lbs. (UL rated)
- Mount is to adjust, without tools, 15° +/- Tilt, Pitch, Roll, and swivel 360°

35” Modern Podium – Video Furniture International Model PD3009 Modern Podium with Flip-up Shelf and the following features:

- Dimensions: 35” x 27” x 44.5” (W x D x H)
- Locking front cabinet doors
- Slide-out molded keyboard tray with mouse pad
- Side flip-up shelf for projector or document camera
- 2 Space Painted Steel Utility Shelf
- 14 space EIA compliant threaded rack rails
- PC storage compartment 10.5”W x 26.5”H x 23”D
- Made with furniture grade laminates
- Belkin F5U40203INKY 3 input USB Hub w/Grommet
- Cooling fan
- Rear access panel
- Heavy duty locking casters for easy maneuvering
- Medium Cherry color preferred but CNM will consider other choices based on availability

LCG3 Smart Power Strip (or equivalent) Energy Saving Power Strips with the following features:

- One master outlet controlling selected other outlets
- Three switchable outlets controlled by master outlet
- Two unswitched outlets that remain “Hot” at all times

Dalite 36445 Model C 130” Diagonal 69” x 110” Manually Operated Screen w/Dalite Floating Mounting Brackets (white)
The principle Crestron unit (Crestron MPS-100) will be rack mounted in the podium. The audio will follow the selected source through the Crestron system to the wall mounted speakers.

Crestron Signal Routing and control system. This system includes all the following listed components to achieve full functionality desired in the classroom control and routing system. Components per room include:

Crestron MPS100 Multimedia Presentation System

The Multimedia Presentation System provides and integrates the following principal systems:

- Audio/Video switching
- Audio/Video reinforcement and distribution
- Video interface equipment
- Audio interface equipment
- Ethernet and e-control support
- RoomView and SNMP support
- Room control processor

Crestron QMRX12G QuickMedia Receiver with Audio. The QuickMedia Receiver shall support the following functions:

- Receive RGB and video signals over a single CAT5e type cable
- Shall include one bidirectional RS-232 port
- Shall include one IR/Serial port for control of display device
- Compact design allowing mounting next to QM switcher

Crestron C2NFTBDB QuickMedia Flip Top Media Center with Cable Storage Compartment

- The panel has the following features:

- 3-gang size
- To be mounted in podium
- 10 programmable buttons with LED feedback
- Engraved Button Caps
- Customizable backlit button labels
- Volume control and LED bar graph
- Built-in IR receiver and light sensor
- Power-over-Ethernet compatible
Crestron MP-WP180B input wall panels in wall located by power and data at identified teaching wall. Plate includes the following jacks:

- One Crestron Cresnet jack
- One Crestron QuickMedia RJ-45 port

Crestron CRESCAT QMPSP Cat 5E Plenum Cable to connect all components

One (1) DVD/VCR Combo unit – Toshiba SDV296 or equivalent

Room Speaker System to include:

- Atlas 818R T Bar Bridge for mounting speakers
- Atlas L9587 Speaker Enclosures
- Atlas PA1001G 100w/70v Amp and 100V single channel Pole mounted Speaker Amplifier
- IEC CAB00218SPLS Plenum Speaker Wire

CNM will provide AC outlet and network ports.

Vendor will install the Crestron MP-WP180 control plate into the structural wall at the identified teaching area.

The vendor will be responsible for the fully operational installation and CRESTRON component programming of the listed systems and components using all necessary and construction rated cables. The vendor will also be responsible for the engraving of the button caps located on the C2N-FTB QuickMedia Flip-Top.

The vendor will include all projector mounting poles and the LCG3 Smart Power Strip for the podium as part of the overall install cost.

The vendor will provide all equipment and cabling required to enable these systems. The CNM network and electrical cabling will be the responsibility of CNM. Computer(s) will be supplied by CNM.

The vendor will be responsible for providing a final system design that meets CNM specifications and achieves the desired functionality. The selected vendor will be responsible for completed installation. The vendor will test and demonstrate to CNM staff (audiovisual Services) full system functionality.

The vendor’s response to system or individual component failure is the next business day after notification by CNM of any technical issue. On site response, component replacement or repair is required by end of business the next day.

CNM reserves the right to accept or deny the installed systems based on demonstrated functionality.