

# Audio Visual Equipped Classrooms

## AVEC Guide

Please click on any of the blue tabs to get learn more about technology in your classrooms:

Classroom Instructions	Interactive Technology	Online Lecture Resources	Classroom Presentation Resources	Laptop Cable Connections	Troubleshooting
<a href="#">Interactive rooms</a> <a href="#">Media Lite rooms</a> <a href="#">How to Connect to Air Media</a> <a href="#">Johnson Center Standard Classrooms</a> <a href="#">Johnson Center 013 Collaborative Classroom</a>	<a href="#">Interactive Device Software</a> <a href="#">How to Connect to the SMART Podium</a> Driver Links: <a href="#">SHARP Interactive Sharp Downloads Page</a> <a href="#">PC</a> <a href="#">MAC</a> SMART Ink: <a href="#">Smart Downloads Page</a> <a href="#">PC</a> <a href="#">MAC</a>	<a href="#">Echo360 Resource Center</a> <a href="#">Echo360 Ad Hoc Capture</a>	<a href="#">AV PowerPoint</a> <a href="#">Clicker Resources</a> <a href="#">Equipment Available for Loan</a> <a href="#">SMART Podium: annotation with Presenter View in Power Point &amp; Extended Display</a> <a href="#">Echo360 Capable Rooms</a>	<a href="#">Laptop Connectors &amp; Adapters</a> <a href="#">HDMI Information</a> <a href="#">VGA Information</a> <a href="#">USB Information</a> <a href="#">Thunderbolt Connection Information</a> <a href="#">Mini Display Port Information</a>	<a href="#">Known Issues</a> <a href="#">Troubleshooting Information</a> <a href="#">Discussion Board</a>

## Audio Visual Equipped Classroom (AVEC)

The goal of the newest classes is to give users a brand new experience with presentation technology. Presenters will now have the ability to turn the system on without pressing a button, write directly on the interactive board or SMART podium, present from any device wirelessly, route presentation sources to different displays, and record their lecture.

As you learn to use these technologies, you will experience opportunities to enhance pedagogy and create a more fulfilling experience for students. Remember, Rome was not built in a day, so do not try to master all concepts at once. Instead, find out what works best and build on it, adding a new feature as time and opportunity become available.

On North Park's campus, there is more than one type of room: [Interactive](#), [Media Lite](#), and Pre 2013-2014. You will need to know what type of room that you will be in as well as if you need any accessories. For instance, Mac laptops require special adapters to connect to the HDMI or VGA cables. *Do you know which cable you are connecting to and which adapter you need?* See [this](#) page for more information on [adapters](#). See below for more information:

**Search for room information here (e.g. C45):**

## INTERACTIVE (our most sophisticated AVEC)

Our most sophisticated rooms include:

- Interactive Whiteboard/Smart Podium capability
- Wireless connectivity for computer devices
- High definition connections (HDMI)
- Blu-ray disc players
- High definition document cameras
- Lecture capture capability
- wireless control of system
- Document Camera

**The interactive rooms have prerequisites! If you are teaching in an interactive room and would like to take advantage of the interactive functionality in the room, please make sure that you have completed these steps:**

- Make sure that you have an up to date laptop. If you need assistance, contact IT.
- The Johnson Center are HDMI only classrooms, so make sure that you know what an HDMI cable looks like and you laptop has a HDMI port. see:[Connectors & Adaptors](#). Rooms in other buildings have both VGA and HDMI connectors available.
- You will need to connect to the USB cable to your computer, Make sure that you know what the USB cable looks like and where the USB Port is located on the computer. see:[Connectors & Adaptors](#)
- If you have a Mac laptop, be aware that you will need a video adapter, see the [Connectors & Adaptors](#) page.
- Choose the interactive drivers/software for the device that you wish to work with (SMART or SHARP) . You can find more information and download resources by clicking on the provided link: [Interactive Software](#)
- Every time you use the Sharp Interactive or the SMART Podium, you must calibrate the screen to the software. You will be prompted to do this after you plug the USB cable into your laptop.



### Where are the interactive rooms???

Interactive rooms are: Athletic Training Center, G33 (Bsmt Carlson), C33, C43, C45, Mag 6, Sohlberg 2, Helwig 208A & 208B, and all classrooms in the Johnson Center.

## MEDIA LITE

Our Media Lite Rooms include:

- Wireless connectivity for computer devices and other devices
- Analog (VGA) and High definition Connections (HDMI). see: [Connectors & Adaptors](#)
- Wireless control of system
- Projector and Screen
- Document Camera

Even though Media Lite classrooms do not have the same level of sophistication as the interactive classrooms, the base benefits are still the same. Professors will be able to turn the system on without touching a button, use Air Media, and connect with an HDMI cable.



### Where are the Media Lite rooms

Media Lite rooms are: C21, C32, C34, C35, C36, C37, C41, C42, Mag2, N21, Wilson 21, Wilson 22

## Pre 2013-2014 rooms:

- Projector and Screen
- Document Camera
- Analog (VGA) connection only. see: [Connectors & Adaptors](#)

Pre 2013-2014 rooms are: Most rooms not listed above.

Please click on the link to get more information about the room you are teaching in:

### Johnson Center Room Descriptions

*Instruction set: [Interactive Rooms](#)*

This standard room will contain one (1) eighty (80) inch flat panel interactive monitor which will be located behind the instructor's podium. There is also a SMART Podium in these rooms with the same functionality as the interactive monitor. Both the SMART Podium and interactive monitor are utilized to display presentation materials from available room sources. With the appropriate software loaded on a laptop, a presenter may annotate information displayed on the SMART podium or Sharp interactive TV. Faculty will connect to these devices via supplied HDMI and/or USB cables. These classrooms also have standard white erase boards which are not connected to any technology devices but can be accessed for use by both the faculty and students.

An instructor's podium will be located at the front of the room and will be utilized as the main location for technology control equipment within the classroom. This podium will feature a disc player, document camera, Crestron Air Media and laptop computer video connection capability.

Faculty will control the functioning of the room electronics via an iPad Mini which will provide 'easy to use' control buttons for all available technology devices in the room. The Crestron iPad interface will allow the instructor to choose the source device (disc player, laptop, document camera, AirMedia) and send its content to the destination devices (Interactive Monitor, Echo 360, SMART Podium).

Ceiling microphones and ceiling mounted speakers along with a camera focused on the instructor for use with the Echo 360 lecture capture system are installed in all standard rooms. Not all One (1) TV rooms will use Echo 360, but all will be wired and designed for possible future use.

### Carlson Tower Room Descriptions

*Instruction set: [Interactive Rooms](#)*

This standard room contains one (1) eighty (80) inch flat panel interactive monitor and one (1) eighty (80) inch passive monitor. Both TV's are located behind the instructor's podium. There is also a SMART Podium in these rooms with the same functionality as the interactive monitor. Both the SMART Podium and interactive monitor are utilized to display presentation materials from available room sources. With the appropriate software loaded on a laptop, a presenter may annotate information displayed on the SMART podium or Sharp interactive TV. Faculty will connect to these devices via supplied HDMI and/or USB cables. These classrooms also have standard white erase boards which are not connected to any technology devices but can be accessed for use by both the faculty and students.

An instructor's podium will be located at the front of the room and will be utilized as the main location for technology control equipment within the classroom. This podium will feature a disc player, document camera, Crestron Air Media and laptop computer video connection capability.

Faculty will control the functioning of the room electronics via an iPad Mini which will provide 'easy to use' control buttons for all available technology devices in the room. The Crestron iPad interface will allow the instructor to choose the source device (disc player, laptop, document camera, AirMedia) and send its content to the destination devices (Interactive Monitor, Passive Monitor, Echo 360, SMART Podium).

Ceiling microphones and ceiling mounted speakers along with a camera focused on the instructor for use with the Echo 360 lecture capture system are installed in all standard rooms.

### Magnuson and Other Room Descriptions

#### **Magnuson 6**

*Instruction set: [Interactive Rooms](#)*

This standard room will contain one (1) eighty (80) inch flat panel interactive monitor which will be located behind the instructor's podium. There is also a SMART Podium in these rooms with the same functionality as the interactive monitor. Both the SMART Podium and interactive monitor are utilized to display presentation materials from available room sources. With the appropriate software loaded on a laptop, a presenter may annotate information displayed on the SMART podium or Sharp interactive TV. Faculty will connect to these devices via supplied HDMI and/or USB cables. These classrooms also have standard white erase boards which are not connected to any technology devices but can be accessed for use by both the faculty and students.

An instructor's podium will be located at the front of the room and will be utilized as the main location for technology control equipment within the classroom. This podium will feature a disc player, document camera, Crestron Air Media and laptop computer video connection capability.

Faculty will control the functioning of the room electronics via an iPad Mini which will provide 'easy to use' control buttons for all available technology devices in the room. The Crestron iPad interface will allow the instructor to choose the source device (disc player, laptop, document camera, AirMedia) and send its content to the destination devices (Interactive Monitor, Echo 360, SMART Podium).

Ceiling microphones and ceiling mounted speakers along with a camera focused on the instructor for use with the Echo 360 lecture capture system are installed in all standard rooms. Not all One (1) TV rooms will use Echo 360, but all will be wired and designed for possible future use.

#### **Magnuson 2**

*Instruction set: Interactive Rooms*

This standard room contains one (1) eighty (80) inch flat panel interactive monitor and one (1) eighty (80) inch passive monitor. Both TV's are located behind the instructor's podium. There is also a SMART Podium in these rooms with the same functionality as the interactive monitor. Both the SMART Podium and interactive monitor are utilized to display presentation materials from available room sources. With the appropriate software loaded on a laptop, a presenter may annotate information displayed on the SMART podium or Sharp interactive TV. Faculty will connect to these devices via supplied HDMI and/or USB cables. These classrooms also have standard white erase boards which are not connected to any technology devices but can be accessed for use by both the faculty and students.

An instructor's podium will be located at the front of the room and will be utilized as the main location for technology control equipment within the classroom. This podium will feature a disc player, document camera, Crestron Air Media and laptop computer video connection capability.

Faculty will control the functioning of the room electronics via an iPad Mini which will provide 'easy to use' control buttons for all available technology devices in the room. The Crestron iPad interface will allow the instructor to choose the source device (disc player, laptop, document camera, AirMedia) and send its content to the destination devices (Interactive Monitor, Passive Monitor, Echo 360, SMART Podium).

Ceiling microphones and ceiling mounted speakers along with a camera focused on the instructor for use with the Echo 360 lecture capture system are installed in all standard rooms.

*Instruction set: Interactive Rooms*

This standard room will contain one (1) eighty (80) inch flat panel interactive monitor which will be located behind the instructor's podium. There is also a SMART Podium in these rooms with the same functionality as the interactive monitor. Both the SMART Podium and interactive monitor are utilized to display presentation materials from available room sources. With the appropriate software loaded on a laptop, a presenter may annotate information displayed on the SMART podium or Sharp interactive TV. Faculty will connect to these devices via supplied HDMI and/or USB cables. These classrooms also have standard white erase boards which are not connected to any technology devices but can be accessed for use by both the faculty and students.

An instructor's podium will be located at the front of the room and will be utilized as the main location for technology control equipment within the classroom. This podium will feature a disc player, document camera, Crestron Air Media and laptop computer video connection capability.

Faculty will control the functioning of the room electronics via an iPad Mini which will provide 'easy to use' control buttons for all available technology devices in the room. The Crestron iPad interface will allow the instructor to choose the source device (disc player, laptop, document camera, AirMedia) and send its content to the destination devices (Interactive Monitor, Echo 360, SMART Podium).

Ceiling microphones and ceiling mounted speakers along with a camera focused on the instructor for use with the Echo 360 lecture capture system are installed in all standard rooms. Not all One (1) TV rooms will use Echo 360, but all will be wired and designed for possible future use.

*Instruction set: Media Lite Instructions*

This room only uses the core components to create an efficient teaching environment. This design is different from other classrooms in that the system features a high definition laser projector, HDMI and VGA for computer connection, Air Media, and a Document Camera and an iPad mini for control. The HD laser projector now projects onto a 16:10 screen, which makes content easier to see for students. Also, there is no bulb as the projector contains *laser projection technology*. This eliminates class disruptions due to a dim or burnt out bulb.

Overall, the functionality remains the same. Faculty will have the ability to walk into a room and plug their powered laptop or devices into the podium with either a VGA or HDMI; the system should automatically turn on. If they are unable to plug into the podium, the professor can use Air Media to wirelessly connect to the system.

**Wilson 21 and 24**

*Instruction set: Fully Mediated Rooms (including Lecture Capture)*

The Cadaver and Anatomy lab is actually two (2) classrooms separated by a corridor. The Anatomy lab contains one (1) eighty (80) inch flat panel interactive monitor and one (1) eighty 80 inch passive monitor. Both monitors are located behind the instructor's podium. There is also a SMART Podium in these rooms with the same functionality as the interactive monitor. Both the SMART Podium and interactive monitor are utilized to display presentation materials from available room sources. With the appropriate software loaded on a laptop, a presenter may annotate information displayed on the SMART podium or Sharp interactive TV. Faculty will connect to these devices via supplied HDMI and/or USB cables. These classrooms also have standard white erase boards which are not connected to any technology devices but can be accessed for use by both the faculty and students.

In the Anatomy Lab (027) an instructor's podium will be located at the front of the room and will be utilized as the main location for technology control equipment within the classroom. This podium will feature a disc player, document camera, Crestron Air Media and laptop computer video connection capability. This room also features in-ceiling mounted speakers and microphones that can be utilized for lecture capture in that space as well as two way communications between the Anatomy and Cadaver Labs. This shared functionality would be initiated by the instructor from the iPad Mini located in the Anatomy Lab. Faculty will control the functioning of the room electronics via an iPad Mini which will provide 'easy to use' control buttons for all available technology devices in the room. The Crestron iPad interface will allow the instructor to choose the source device (disc player, laptop, document camera, Berchtold Camera, AirMedia) and send its content to the destination devices (Interactive Monitor, Passive Monitor, Echo 360, SMART Podium).

The Cadaver Lab (028) section of these rooms will have two (2) sixty (60) inch wall mounted monitors with tilt capability. There will be one Berchtold integrated camera and light mounted above an examination table. That camera is connected so that students in the Anatomy Lab can observe the examination taking place in the Cadaver Lab via the in-room monitor. The instructor will control the technology through the Crestron iPad interface using an iPad Mini which can be docked in the Anatomy Lab. A lapel microphone and two ceiling mounted speakers are also provided in the Cadaver Lab to allow two way communications between rooms 027 & 028.

*Instruction set: Media Lite Instructions*

This room only uses the core components to create an efficient teaching environment. This design is different from other classrooms in that the system features a high definition laser projector, HDMI and VGA for computer connection, Air Media, and a Document Camera and an iPad mini for control, and a mobile podium. The HD laser projector now projects onto a 16:10 screen, which makes content easier to see for students. Also, there is no bulb as the projector contains *laser projection technology*. This eliminates class disruptions due to a dim or burnt out bulb.

An instructor's podium will be located at the front of the room and will be utilized as the main location for technology control equipment within the classroom. This podium will contain the document camera, Crestron Air Media and laptop computer video connection capability.

Faculty will control the functioning of the room electronics via an iPad Mini which will provide 'easy to use' control buttons for all available technology devices in the room. The Crestron iPad interface will allow the instructor to choose the source device (laptop type, document camera, AirMedia) and send its content to the laser projector and speakers.

Overall, the functionality remains the same. Faculty will have the ability to walk into a room and plug their powered laptop or devices into the podium with either a VGA or HDMI; the system should automatically turn on. If they are unable to plug into the podium, the professor can use Air Media to wirelessly connect to the system.

*Instruction set: Media Lite Instructions*

This room only uses the core components to create an efficient teaching environment. This design is different from other classrooms in that the system features a high definition laser projector, HDMI and VGA for computer connection, Air Media, and a Document Camera and an iPad mini for control. The HD laser projector now projects onto a 16:10 screen, which makes content easier to see for students. Also, there is no bulb as the projector contains *laser projection technology*. This eliminates class disruptions due to a dim or burnt out bulb.

An instructor's podium will be located at the front of the room and will be utilized as the main location for technology control equipment within the classroom. This podium will contain the document camera, Crestron Air Media and laptop computer video connection capability.

Faculty will control the functioning of the room electronics via an iPad Mini which will provide 'easy to use' control buttons for all available technology devices in the room. The Crestron iPad interface will allow the instructor to choose the source device (laptop type, document camera, AirMedia) and send its content to the laser projector and speakers.

Overall, the functionality remains the same. Faculty will have the ability to walk into a room and plug their powered laptop or devices into the podium with either a VGA or HDMI; the system should automatically turn on. If they are unable to plug into the podium, the professor can use Air Media to wirelessly connect to the system.

The primary, though not only, use of this room will be for Board of Trustee meetings. The seats are arranged in a rectangular shape to provide all participants with a clear view to all others. At the front of the room is an eighty (80) inch interactive monitor. There is also a SMART Podium in this room with the same functionality as the interactive monitor. Both the SMART Podium and interactive monitor are utilized to display presentation materials from available room sources. With the appropriate software loaded on a laptop, a presenter may annotate information displayed on the SMART podium or Sharp interactive TV. The presenter will connect to these devices via supplied HDMI and/or USB cables. There are four possible presenter locations. Only one of which is "live" to the Crestron system. All four are also live for network only. An eighty (80) inch passive monitor is located on each side of the room. The presenter will use the interactive monitor to make presentations or demonstrations to the class/meeting participants. The passive TV's will be used to mirror the content of the interactive monitor or to display different content which the presenter selects.

The equipment rack located in the equipment closet will feature a disc player, document camera and Crestron Air Media sources. Laptop computer connectivity is facilitated via an HDMI and USB outlet at the presenter location. The presenter location will be from the floor box located in the North West corner. This would be the floor box closest to the equipment closet. The Crestron iPad interface will also allow the presenter to choose the source device (disc player, laptop, document camera, AirMedia) and send its content to the destination devices (Interactive or Non-interactive Monitor, Echo 360). All of the technology devices will be controlled by an iPad Mini which will be docked and recharged at the presenter location.

Speakers are mounted at locations both in the ceiling and on the walls to facilitate lecture capture as well as content playback from any connected audio device. Microphones will be placed on the table between every two participants. The presenter will access the Crestron platform through an iPad mini that will offer easy to use control buttons for all relevant technology devices in the room. The Crestron iPad interface will also allow the presenter to choose the source device (disc player, document camera, Air Media, laptop connection). The presenter will also have access to two (2) wireless lapel microphones. A camera is mounted above each passive display. These cameras feature pan/tilt/zoom (PTZ) capabilities which can also be controlled via the Crestron iPad interface from the iPad Mini.

*Instruction set: Interactive Rooms*

The flexible classroom is designed as a collaborative learning space. As such there are forty (40) movable student desks. These can be arranged in five (5) different round clusters or in any configuration that the instructor and students feel best supports the learning experience. One laptop connection is provided at the front of the space for utilization by the presenter. There are also five (5) Crestron Air Media devices provided in this room which are available for wireless presentation capabilities for the room's occupants. There are four (4) eighty (80") inch passive monitors in the room placed two (2) each on opposite walls.

Between those two (2) monitors is a standard white board which can be accessed by anyone in the room. On the adjacent wall is an interactive monitor. An instructor's station will be located at the front of the room and will be utilized as the main location for technology control equipment within the classroom. This station will feature a disc player, document camera, Crestron Air Media and laptop computer connection capability.

Faculty will control the functioning of the room electronics via an iPad Mini which will provide 'easy to use' control buttons for all available technology devices in the room. The Crestron iPad interface will allow the instructor to choose the source device (disc player, laptop, document camera, AirMedias) and send its content to the destination devices (Interactive and Non-Interactive Monitors, Echo 360, SMART Podium).

An important and unique aspect of this room is that instructors will be able to choose an individual student's or small group's computer to display on the monitor or monitors. The instructor will be in complete control of content projection and destination. There are ceiling microphones and ceiling mounted speakers and a camera focused on the instructor for use with the Echo 360 lecture capture system.

*Instruction set: [Interactive Rooms](#)*

This large classroom is configured as a lecture hall with seating for one hundred and thirty (130) students. It is intended to house large lecture classes. The instructor will use the SMART Podium to make coursework presentations or demonstrations to the class. The SMART Podium is utilized to display presentation materials from available sources and enable annotation utilizing the supplied software on the laptop. The available sources are a disc player, document camera, Crestron Air Media or laptop computer.

Faculty will control the functioning of the room electronics via an iPad Mini which will provide 'easy to use' control buttons for all available technology devices in the room. The Crestron iPad interface will allow the instructor to choose the source device (disc player, laptop, document camera, AirMedia) and send its content to the destination devices (Projectors, Echo 360, SMART Podium).

There are also three (3) large white boards located behind the projection screens which are accessible when those screens are not in use. There are three (3) hand-held wireless microphones, a single lapel microphone, ceiling mounted speakers and a camera focused on the instructor for use with the Echo 360 lecture capture system.

In order to insure compliance with ADA requirements for groups of the size that this room accommodates, Assistive Listening Technology is installed in this room. This technology allows access to all broadcast audio by those with hearing impairments.

## Interactive

Please click on the specific components to find out what our latest classroom technology can do.

1. [Crestron "Connect it"](#) (basic connectivity instructions are on this page)
  - a. [HDMI](#) cable for video from your laptop
  - b. [VGA](#) cable for video from your laptop
  - c. [USB](#) connector for interactive TV
  - d. [Ethernet](#) cable for network connection
2. [Oppo BlueRay Player](#). Will play DVD or BlueRay discs
3. [Samsung SDP 860](#) Document Camera
4. [Crestron AM-100](#) (Air Media) for wireless [presenting](#).
5. [Sharp PN-L802B](#) Interactive TV used as a digital whiteboard
6. [Sharp Aquos TV](#) for standard presentation
7. Apple iPad mini for [controlling](#) the room
8. [Echo360 Safe Capture Device](#)

## Other News & Resources

### Discussion Board

#### Blog stream

Create a blog post to share news and announcements with your team and company.



