**Osher
Lifelong
Learning
Institute
at SOU**

Classroom Electronics Guide

Revised: December 2024

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Overview

Classroom IT Equipment

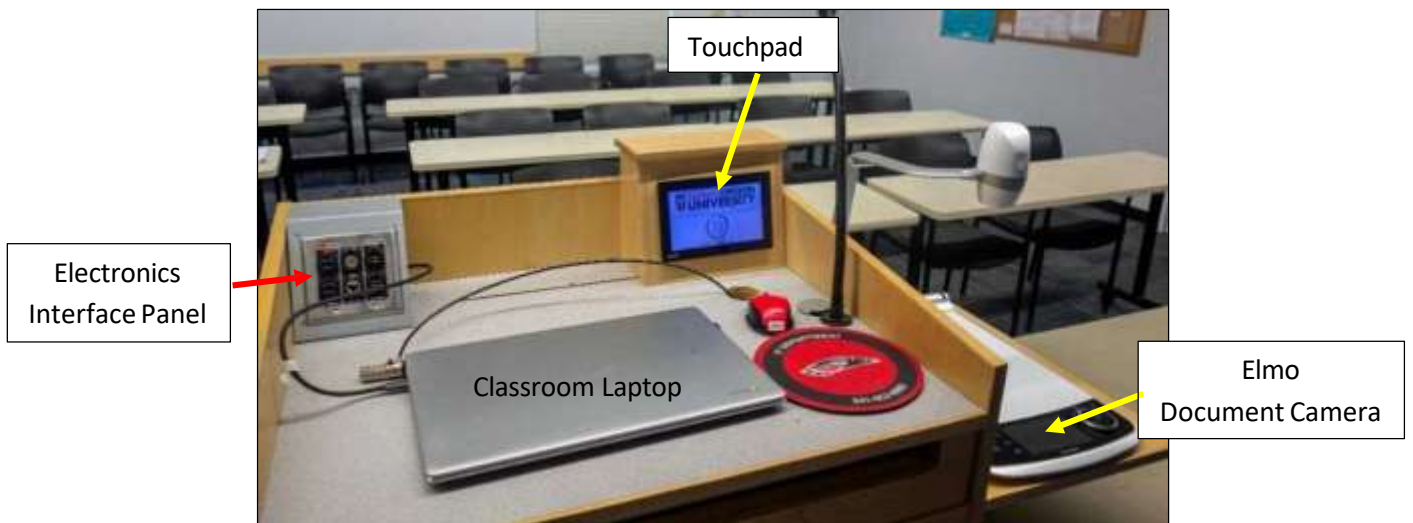Each of the five classrooms at the OLLI Campbell Center include:

- Electronics **Podium**,
- wall-mounted **TV Monitors**,
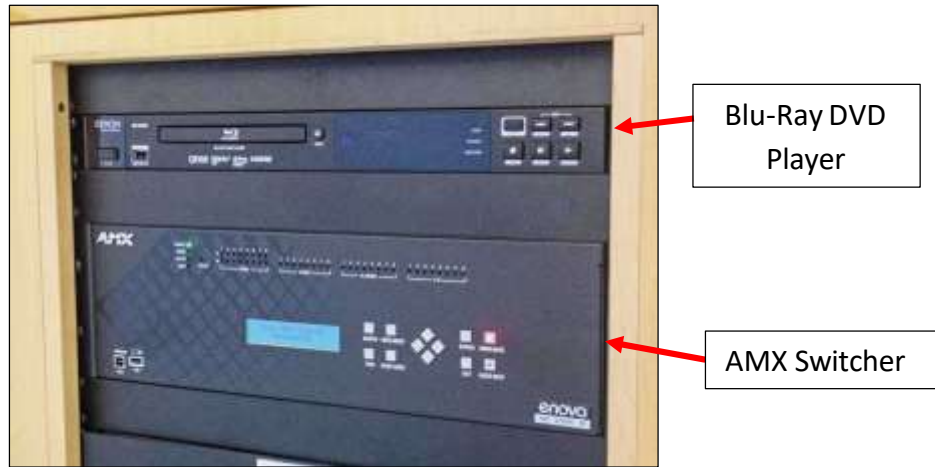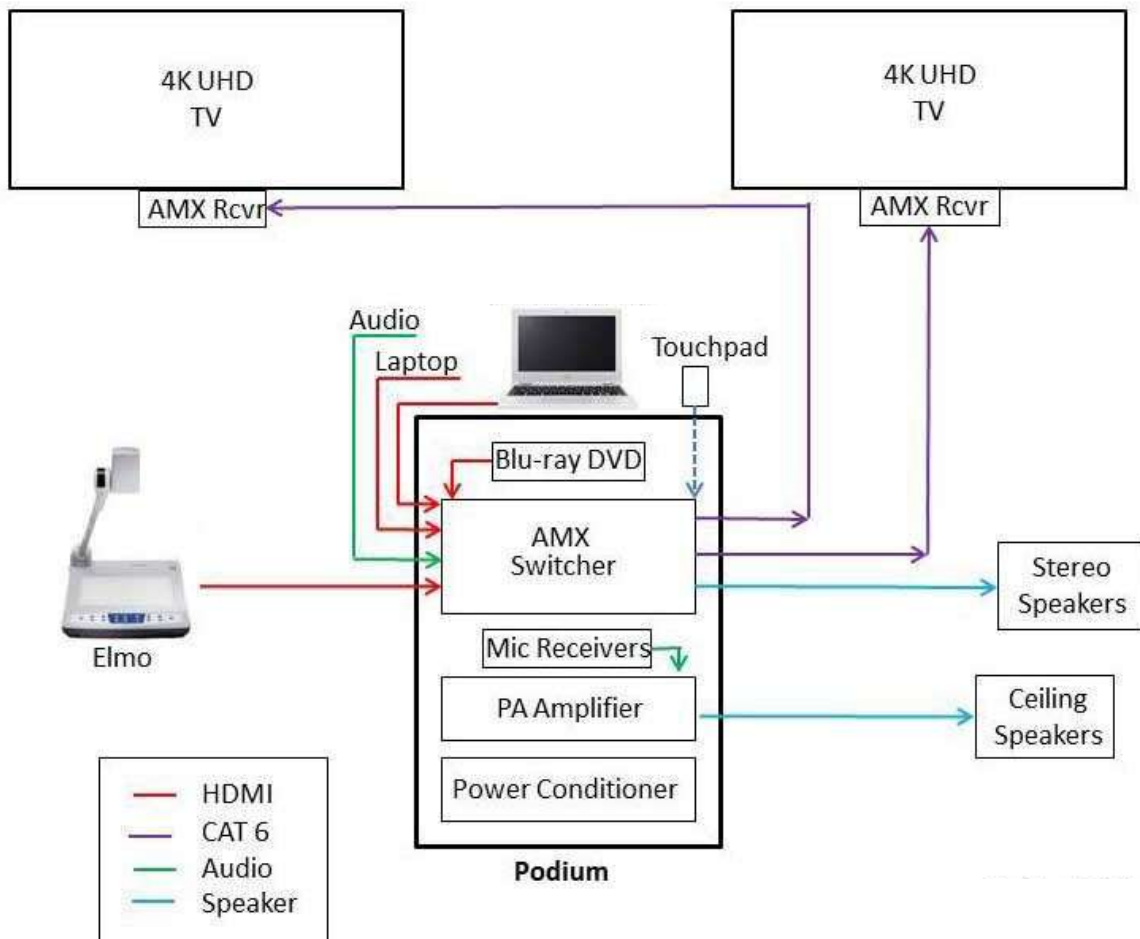- wall-mounted and ceiling **Speakers**.

Classroom A

The Podium includes:

- **Classroom Laptop**
- **Mouse**
- **Touchpad**
- Electronics **Interface Panel**
- Elmo **Document Camera**

- **Blu-ray/DVD Player**
- Lavalier **Lapel Microphone** (Not in B)
- **Handheld Microphone** (Not in B)
- **HDMI** & **Audio cables** and **Slide clicker**

Blu-Ray DVD Player

AMX Switcher

Electronics Flow Chart

4K UHD TV

4K UHD TV

AMX Rcvr

AMX Rcvr

Audio

Laptop

Touchpad

Blu-ray DVD

AMX Switcher

Elmo

Mic Receivers

PA Amplifier

Power Conditioner

Podium

Stereo Speakers

Ceiling Speakers

— HDMI
— CAT 6
— Audio
— Speaker

Operation

The **Touchpad** is the central control hub for using the **Classroom Laptop**, **Elmo Document Camera**, a **Personal Laptop**, **Blu-ray DVD Player** or **Auxiliary Audio** sources.

The operation of the **TV Monitors** is controlled through the **Touchpad**. It is activated by touching the screen.

The **Classroom Laptop** can be used to show PowerPoint presentations. Inputs to the **Classroom Laptop** are provided via USB flash drive on the side of the computer or on the **Electronics Interface Panel**.

The **Elmo Document Camera** allows documents to be displayed via the **TV Monitors**.

In addition to two **Media Speakers**, a set of ceiling mounted **Public Address Speakers** are available for use with the microphones.

The **Electronics Interface Panel** allows the instructor to connect their **Laptop** (Windows or Mac). It also permits external audio devices, such as a **Smart Phone or Tablet** to be used.

Quickstart Guide

Touch the control screen to start:
Then select which piece of equipment you want to use, such as "Classroom Laptop" or "Doc Cam." Both of the TVs will automatically project from that source.

NOTE: Please touch "Shut Down" in the top right corner of the control screen when your class is over, and turn off the Classroom Laptop as well.

To Turn on the Classroom Laptop
If you plan to use the Classroom (Windows) Laptop, you can turn it on by opening the cover and pressing the Power button ⏻ in the upper right corner of the keyboard. You will be taken to a screen asking you to press Control+Alt+Delete simultaneously to get into the University's secure environment. You will then need to log into the laptop using the User ID and Password located on a sticker below the keyboard.

To play a DVD:
- To insert a DVD into the player located on the front of the podium, press the "Eject" button.
- Select "Blu-ray" on touchscreen.
- The DVD will automatically show on the TV screens.
- There is a remote control for the DVD player in the podium drawer.
- Eject the DVD from the player by pressing the "Eject" button.

To use the Document Camera:
- Touch "Doc Cam" on the control screen
- Press the power button on the document camera to turn it on.

Switching applications:

You can switch back and forth between showing the Classroom Laptop, the Document Camera, and other applications by using the podium control screen. Select the button for the device you would like to use.

AFTER HOURS I.T. HELP:
If you need tech help and the OLLI office is closed, please call **SOU I.T. Help Desk** at **541-552-8900**. They are open until 6:00 pm and will send someone to assist you. Please allow 5-10 minutes for them to walk over to the Campbell Center.
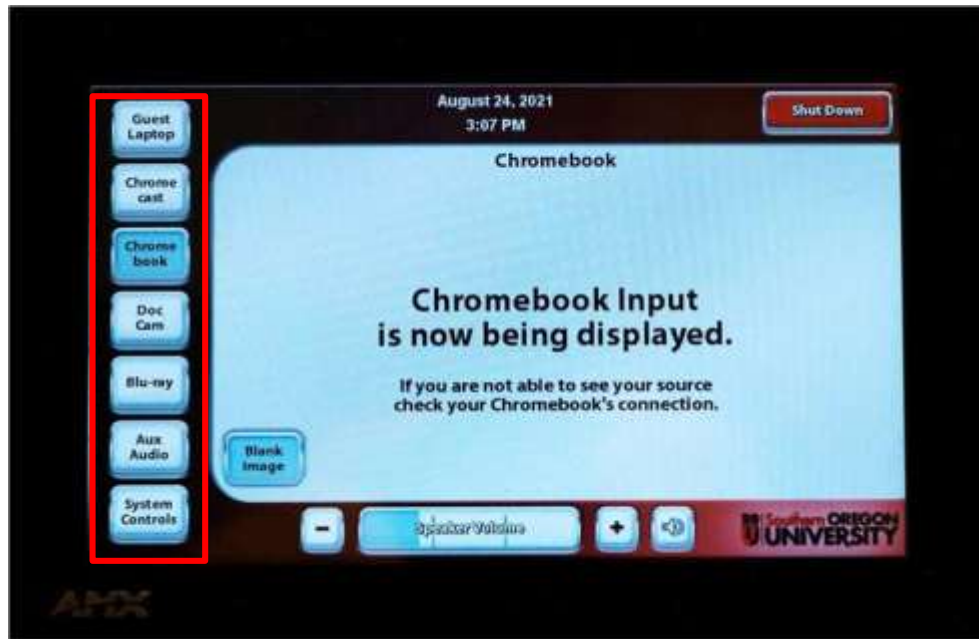
Using the Touchpad Control Screen

The Touchpad Control Screen is very simple to operate. If the system is off, you will see the welcome screen. To start the system, just touch the screen.
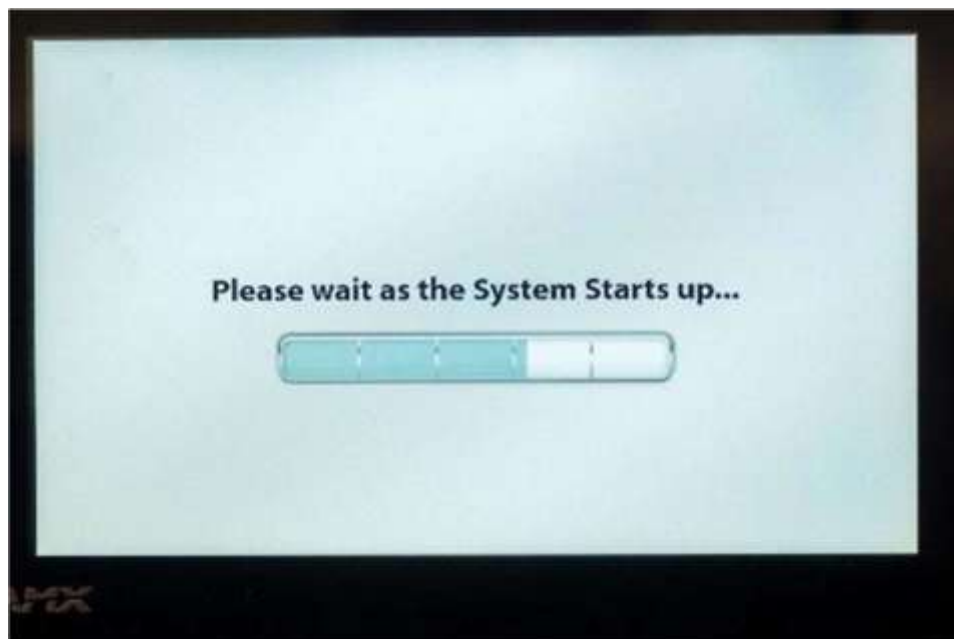
There will be a brief startup time and you will see this progress bar.

You will be taken to the main screen where you will have options to:

1) Project your **Guest Laptop** (Windows or Mac laptop, or iPhone/iPad) via an HDMI input on the top of the podium. See **Troubleshooting** section below if your device does not have an HDMI port.

2) Project the **Classroom Laptop**. ***Note that the current screen still shows "Chromebook" and will be revised in the near future.*** (As shown above)

3) Project the **Doc**ument **Cam**era (*Elmo Visual Presenter*).

4) Project a DVD or **Blu-ray** disk or listen to a CD over the media speakers.

5) Play **Aux Audio** from a phone or other player via a 3.5mm cable.

There are instructions for each input in the following pages.

Projecting the Classroom Laptop

The Classroom Laptop is normally connected and ready to go on the podium. If it is not, plug the USB-C and HDMI cables into the top-left side of the laptop. Alternatively, contact tech support in the OLLI office to reconnect it.

Be sure that the cables are pushed all the way in. If you have any problems check to be sure the connections are tight.
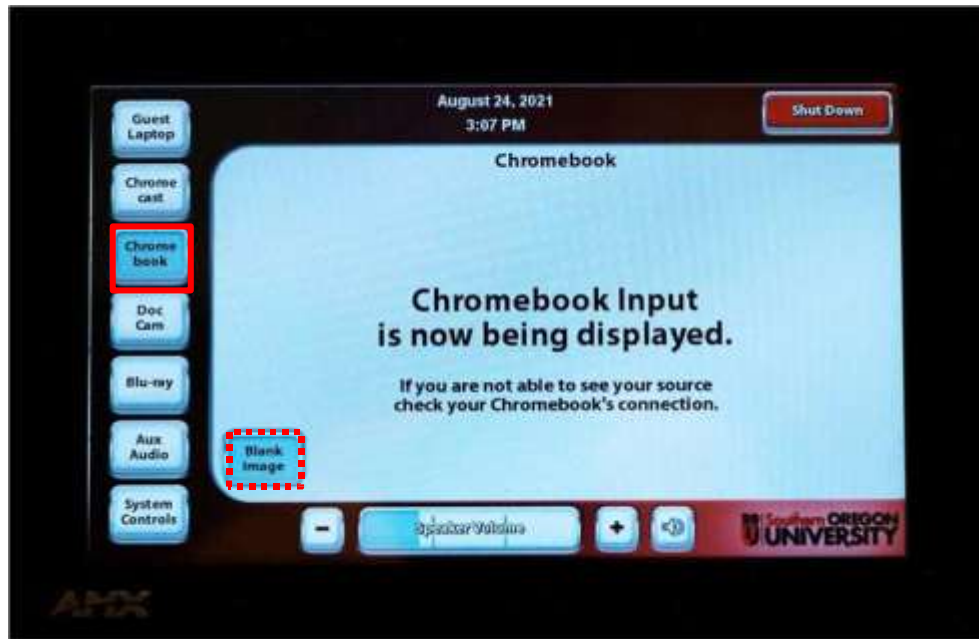

Classroom Laptop cable connections
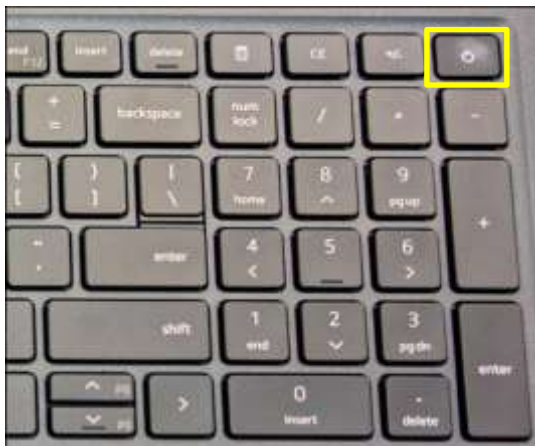
Laptop Power Button in Upper Right

Next, turn on the laptop using the power button located at the upper right-hand corner of the keyboard.

Then the following screens allow you to login. User ID and Password information are noted on a sticker just below the laptop's keyboard.

To display the **Classroom Laptop** screen, press the "Chromebook" button on the touchscreen. ***Note: Relabeling of this button to "Classroom Laptop" is in progress.***

The input will change to the Classroom Laptop and whatever is showing on the laptop screen will appear on the TVs.

NOTE: If you do not see the Classroom Laptop screen on the monitors, see the Troubleshooting page for help or ask for technical help in the OLLI office.

There is a button on the touchscreen labeled **Blank Image** that you can use to temporarily stop projecting the Classroom Laptop on the TV screens. When it is active it will be flashing. Press it again to resume showing the laptop screen.

Classroom Laptop Audio Control

There are at least three volume controls that you need to be aware of for most audio coming through the laptop.

1) The settings in the **application**. For example, a YouTube video has its own audio control at the bottom of the video window.

2) The **Classroom Laptop** volume controls are located at the upper left of the keyboard.
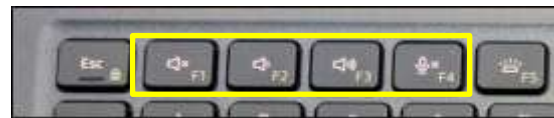
Laptop Audio Controls (Upper Left)

3) The **projection system** which has volume controls at the bottom of the touchpad.

Use the **+** button to turn the audio level up; use the **−** button to turn the level down; use the button with the speaker icon to mute or unmute the system.

Projecting the Document Camera

The document camera is used to project an image of any item on its platform through the TV monitors. This includes any 2- or 3-dimensional object.

Turn the document camera on by pressing and holding down the power button. The button light will turn blue when it is on. It takes a few seconds for the camera to fully boot up.
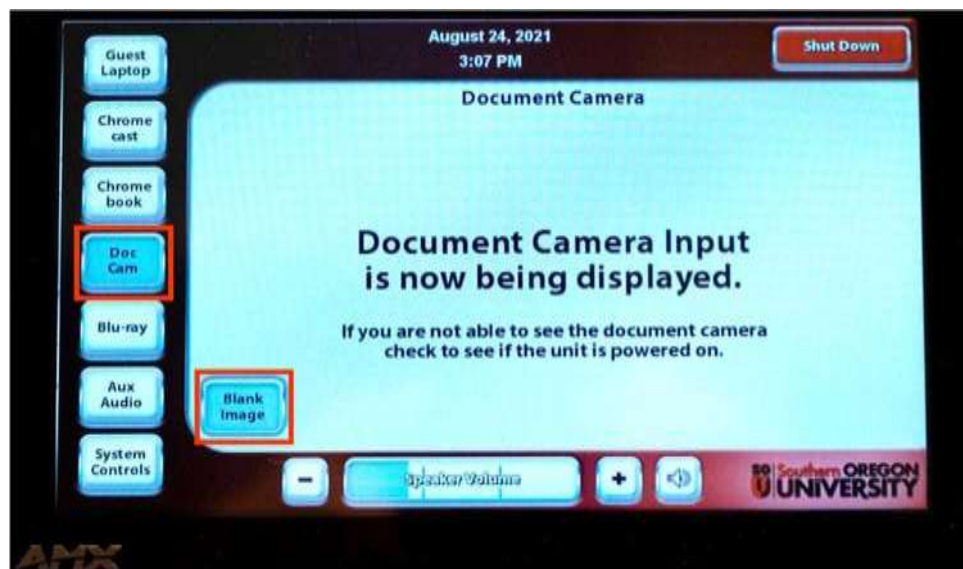
With the document camera on, press the **Doc Cam** button on the touchscreen.

The input will change to the document camera and it will appear on the TV screens.

There is a button on the touchscreen labeled **Blank Image** that you can use to temporarily stop projecting the document camera on the TV screens. When it is activated, it will be flashing. Press it again to resume showing the camera.

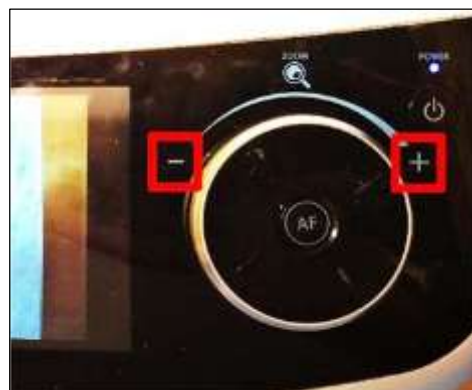## Adjusting the Document Camera

The document camera can be used to display any 2-dimensional or 3-dimensional object. However, for thicker objects, the camera may not be able to display the full image in focus.

When displaying an object, it is possible that not all of it will be shown on the TVs. What is actually displayed is shown in the monitor screen at the bottom of the document camera.

If the object is at the maximum zoomed out range, it may need to be moved up or down. For instance, to view a page of text, zoom in to the full width of the page for best resolution. Then move the page up as required.

You can zoom the camera by using the dial on the control panel, turning it left to zoom out or turn it right to zoom in.

Alternatively, you can use the knob on the side of the camera to zoom.

To activate auto focus, use the **AF** button in the center of the dial.

The document camera can operate with the ambient light in the classroom, such as might be provided by the podium light. However, it also has its own light source.

To use the available lighting features, press the **Brightness setting** icon on the upper left side near the monitor screen. This will open a set of options on the monitor.

Turn on the document camera light by pressing the **Lighting** button. You can adjust the brightness using the **Aperture** slider.

For shiny (reflective) objects, the **AntiReflection** button can be turned on.

Turning the Document Camera Off

When you are through using the camera, turn it off by pressing the **Power** button for a few seconds. The light will turn red when the document camera is off.

Alternative Document Cameras

The above description does not apply to all of the classrooms. For instance, in Classroom B, an earlier model of Elmo is used:

To turn the document camera on, press button on top right. To turn on the light, press button on the bottom.
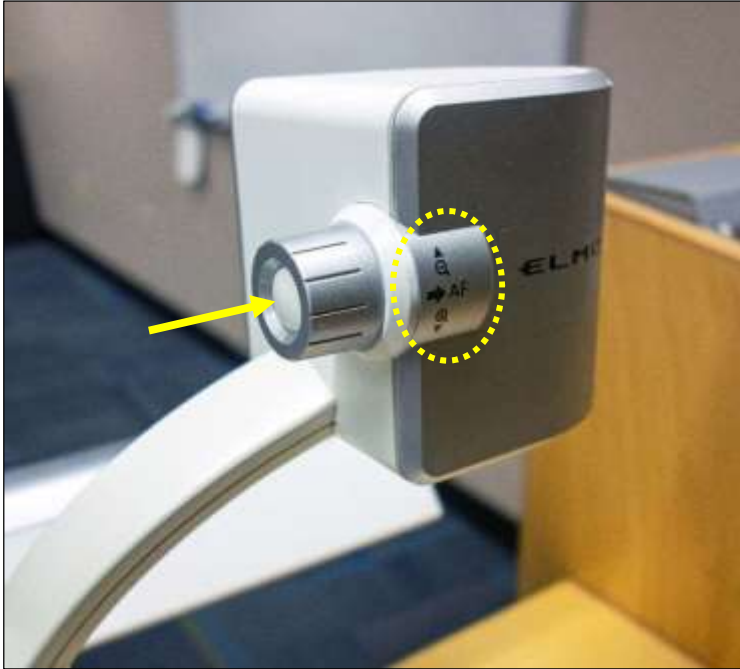
To autofocus, press the button on right side. To adjust the zoom, turn knob up or down.

Projecting a Blu-ray or DVD Disk

The system has a Blu-ray player which is capable of playing virtually every Blu-ray, DVD, and audio CD format. The front USB slot also provides access to MP3, WAV, MP4, WMV, JPG, PNG, GIF files, and more from a standard thumb drive.

The Blu-ray player is located at the top of the equipment rack in the podium.

To project the Blu-ray player press the **Blu-ray** button on the touch panel.
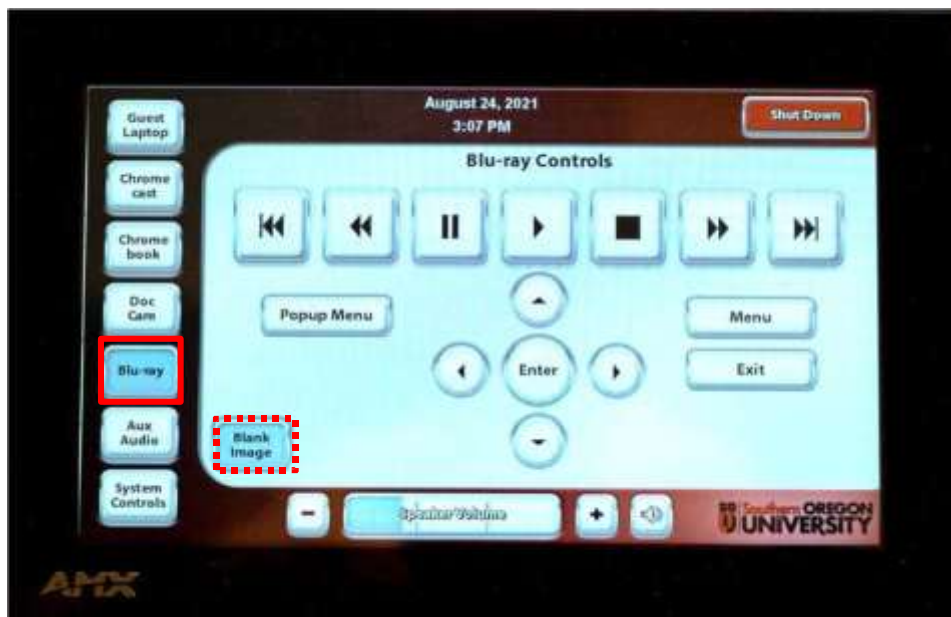
The input will change to the Blu-ray player and you will see the Blu-ray controls on the touchscreen and the player's startup screen on the TVs.

To insert (or remove) a disk, press the **Eject** button on the front of the player.

As shown in the previous figure, the touchscreen has all the normal controls to select disk menu items, play, pause, fast forward and rewind a video. It also has the volume control for DVD audio.

There is a **Blank Image** button to temporarily stop projecting a DVD while keeping your disk in the mode you left it.

NOTE: You can cue the video to the place you want to start before class and the player will hold that spot indefinitely.

If you find it difficult to watch the TV screens and use the touch panel controls, you can use the Blu-ray remote control which is stored in the podium drawer.

NOTE: You may have to adjust your aim and point it in the general direction of the white board behind the podium. The signal will bounce off the white board and into the Blu-ray player. It has been tested and works from the rear of the room.

Playing Audio

There is an **Aux Audio** input that you can use to play music or audio from your phone or other device with a 3.5mm output.

Plug the **Aux Audio** cable (stored in the podium drawer) into the Aux Audio input jack.

Connect the other end of the cable to your device.

NOTE: If your device does not have a 3.5mm output you will need to supply an adapter.

Press the **Aux Audio** button on the touch panel.

This will take you to the Aux Audio control screen where you can control the volume using the **-/+** buttons. You can also mute and unmute the audio by pressing the button with the speaker icon.

Remember that there is also a level control on your device and there may be a level control in the application you are using to play the audio file. All three must be set appropriately for sound quality.

NOTE: When you select Aux Audio on the touchscreen, the previously selected video input will remain live on the TVs. So, for example, you can show a PowerPoint presentation while playing music from your phone. This can also be used to play audio when using a VGA connection that only handles video.

Projecting (Your) Guest Laptop

or

**Electronics Interface Panel**

To project your laptop, you will need to connect it to the system via the HDMI port on the top of the podium. The port is labeled "Laptop". An HDMI cable is provided in the podium drawer which can carry both video and audio into the system. Please use that cable and your own power supply rather than the wires connected to the Classroom Laptop. Repeated removal and reconnecting the laptop wires can cause excessive wear on both the cables and ports.

If your laptop or mobile device does not have an HDMI connection (such as on some Macs, tablets or smartphones), then see the Troubleshooting section for the adapters you will need.

Once you are connected, press the **Guest Laptop** button on the touchscreen. The input will change to your laptop and it will appear on the TVs.

NOTE: You may need to change display settings on your laptop in order to activate the display. Depending on your application the screens may be mirrored or extended. See the Troubleshooting section for more information.

There is a button on the touchscreen labeled **Blank Image** that you can use to temporarily stop projecting your laptop on the TVs. The Blank Image button will flash when it is activated.
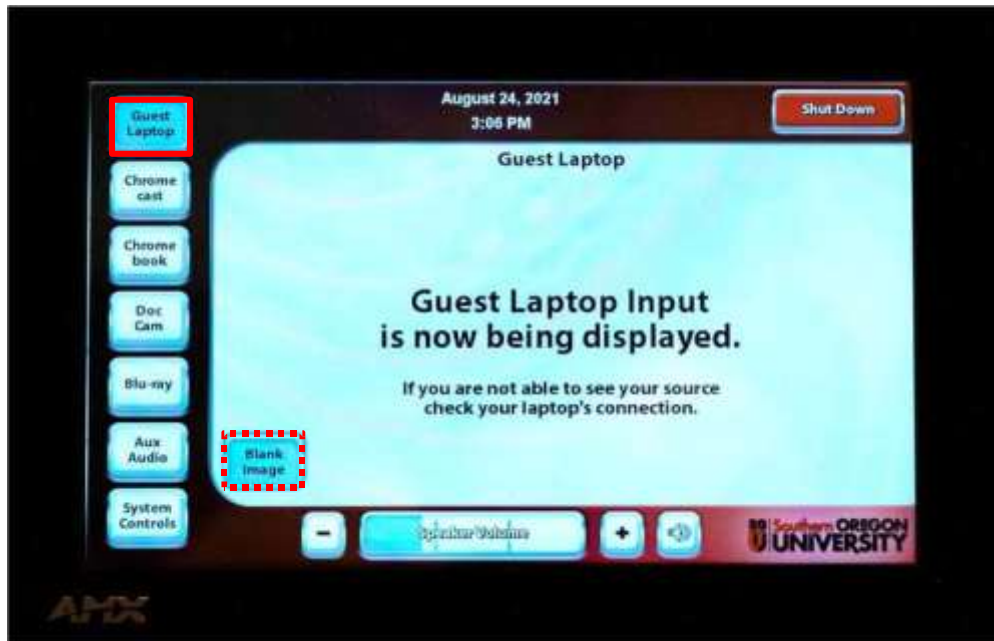
There is a power outlet that you can use for your laptop below the shelf on the left side of the podium.

Laptop Audio Control

There are at least three volume controls that you need to be aware of for audio:

1) The settings in the **application**. For example, a YouTube video has its own audio control at the bottom of the video.
2) Your **laptop** has controls for audio levels, often at the top of the keyboard.
3) The projection system has controls at the bottom of the **touchscreen**.

Use the **+** button to turn the audio level up; use the **–** button to turn the level down; use the button with the speaker icon to mute or unmute the system.
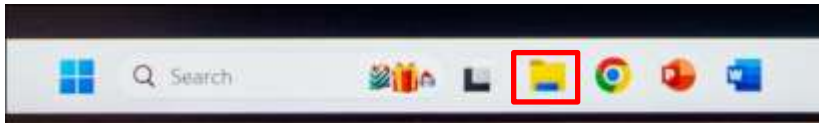
Using PowerPoint on the Classroom Laptop

Open Your Presentation File

If you are using a file you brought to the class, plug your thumb drive into the **USB** port on the side of the laptop. Alternatively, you can plug your thumb drive into the USB port on the podium which is active only when using the Classroom Laptop.

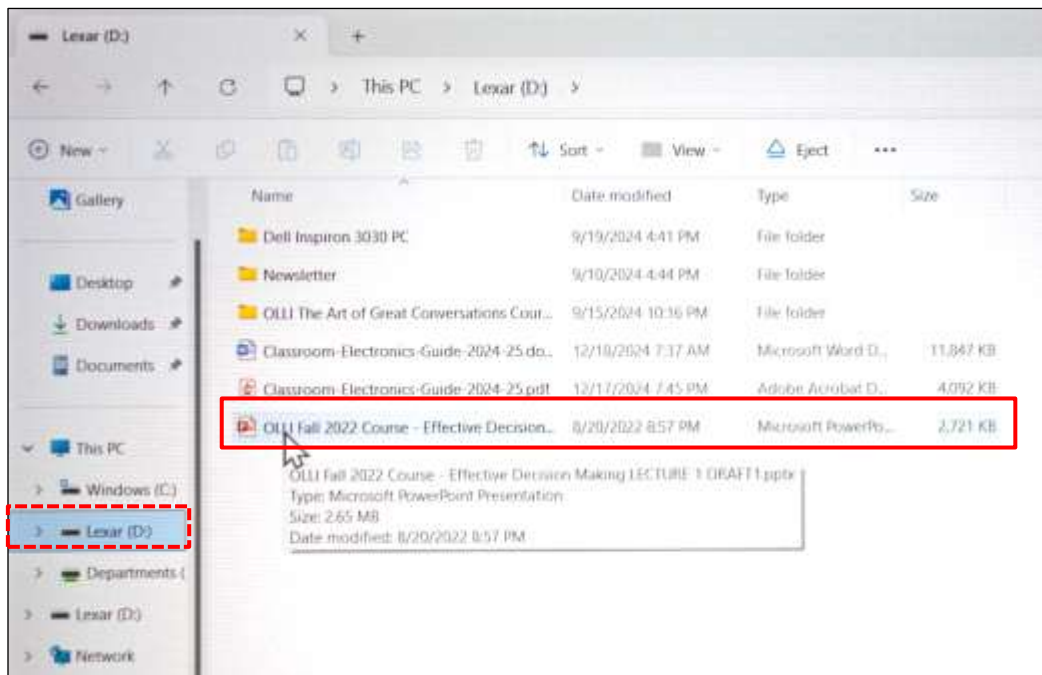Launch **File Explorer** to find your presentation file.

Select File Explorer App

Thumb Drive in USB Slot

NOTE: From the desktop you can also access other apps including the Chrome browser, PowerPoint and Word.

Locate your thumb drive in the left-hand column. Click on it to display the folders. Select the one with your presentation. Double click on your file to open it.

Press the **Slideshow** button at the top right of the PowerPoint screen. Then select **From Beginning** to begin the slideshow.
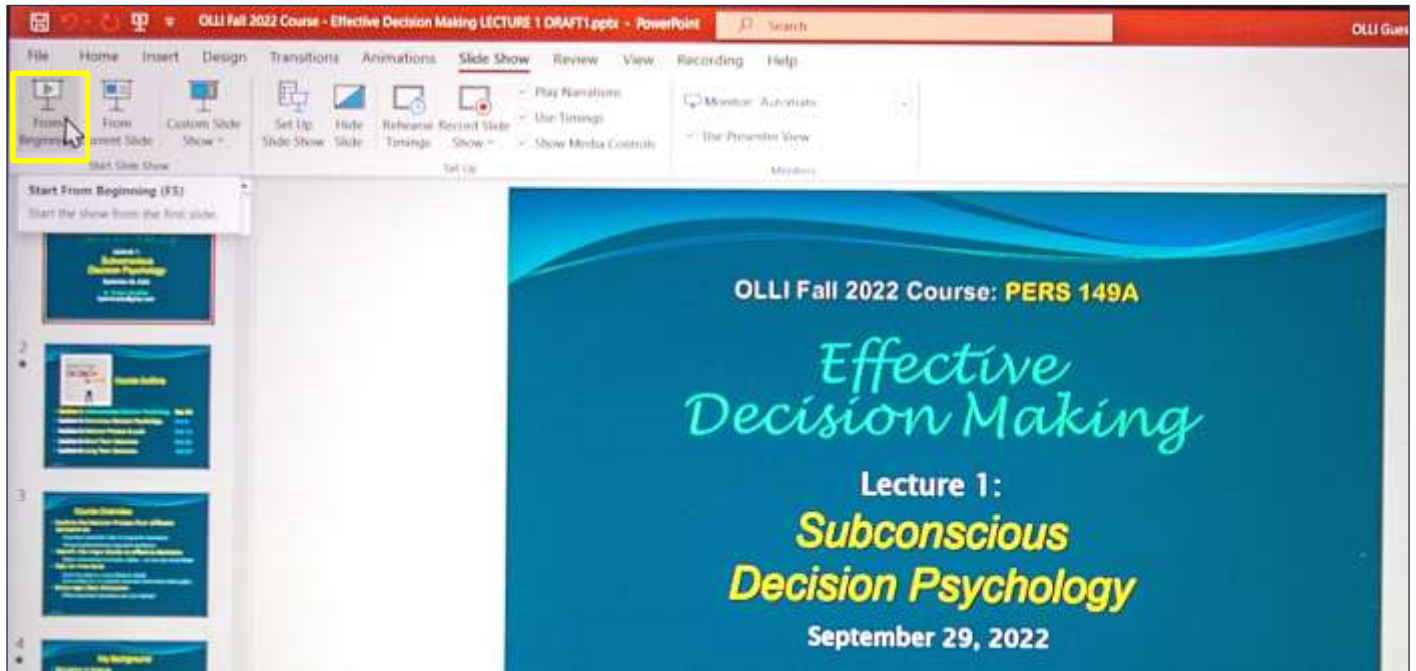
The instructor can view the presentation in Presenter View and the full slide will show on the TVs. Instructor will see:
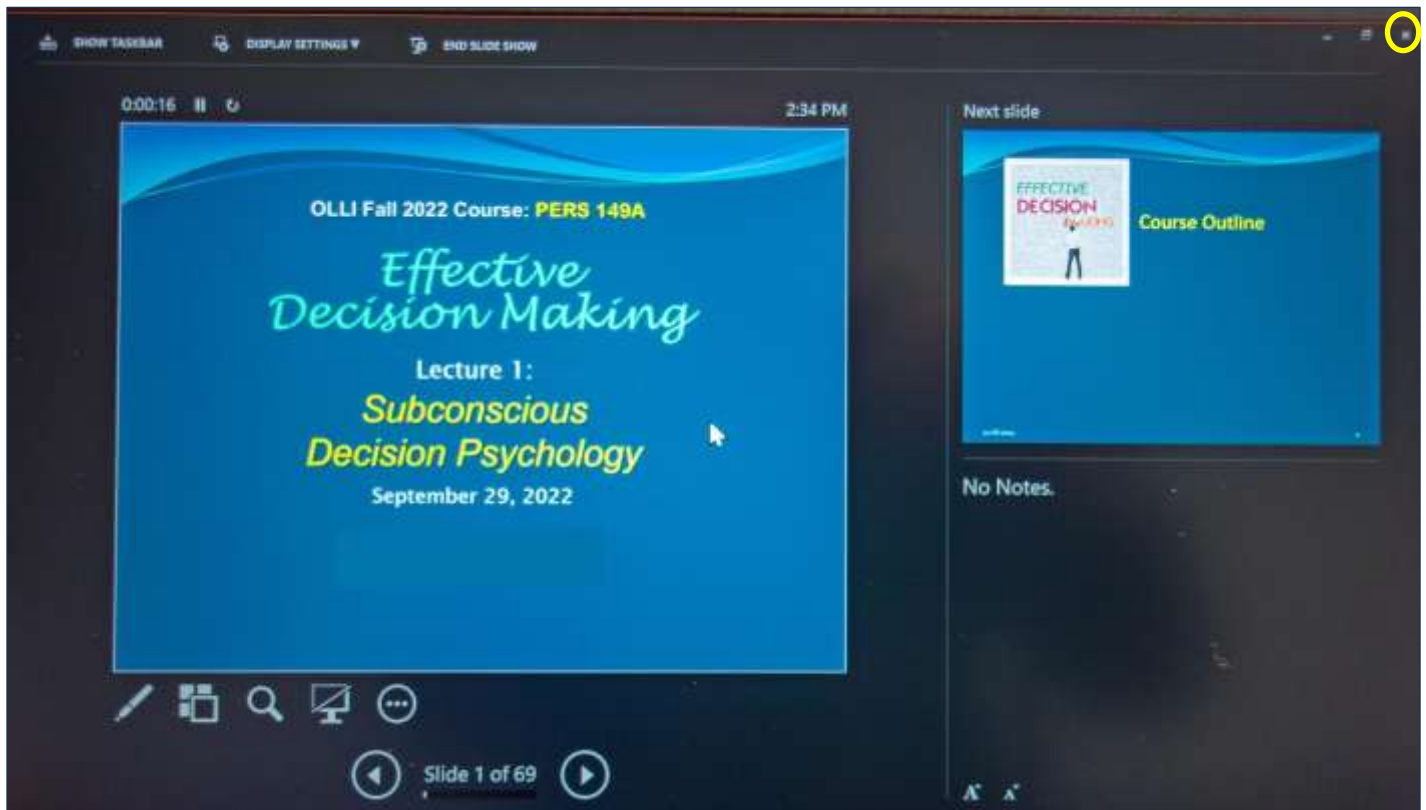
Instructor's Presenter View of Slides
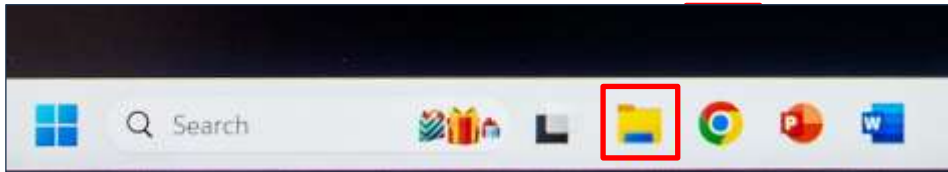
The audience will see:

Audience View of Presentation

When you are finished with your presentation, press the "**esc**" (escape) key on the keyboard to get out of the slideshow mode.
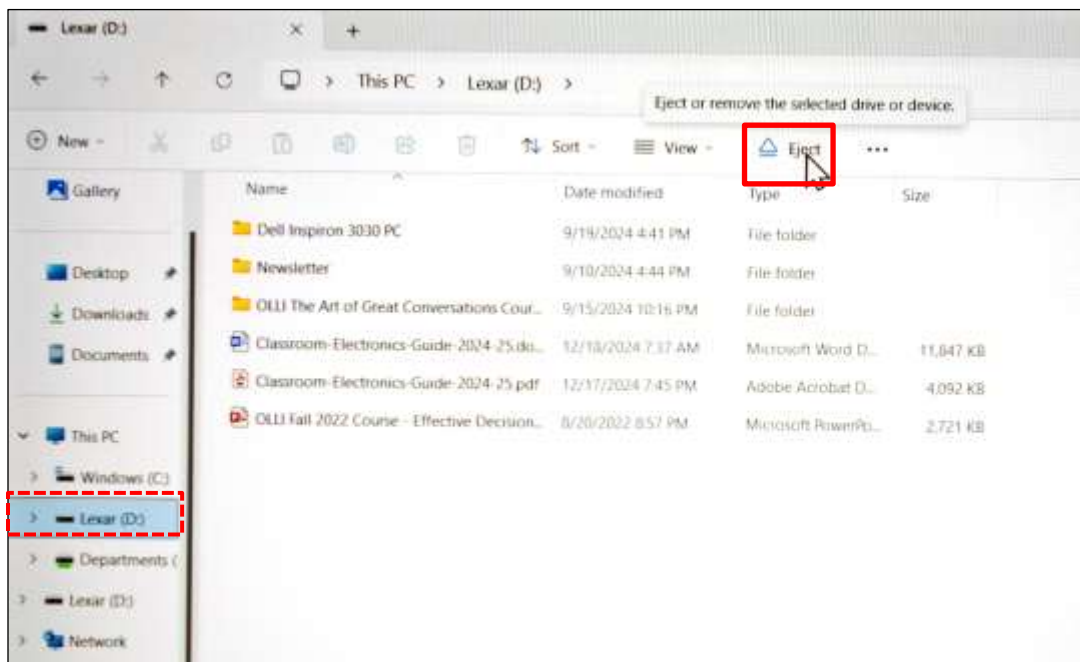
Quit PowerPoint by clicking on the **x** icon at the top right of the screen.

To properly eject your thumb drive

Launch the **File Explorer** app.

Find your thumb drive in the list and click the Eject icon next to it. Once your thumb drive name disappears from the list you can safely remove it from the USB port.

To Shut Down the Classroom Laptop

To shut down the Classroom (Windows) Laptop, click on the Windows icon ▦ at the bottom of the screen. On the screen that pops up, click on the Power icon ⏻ in the lower right and select Shut Down.
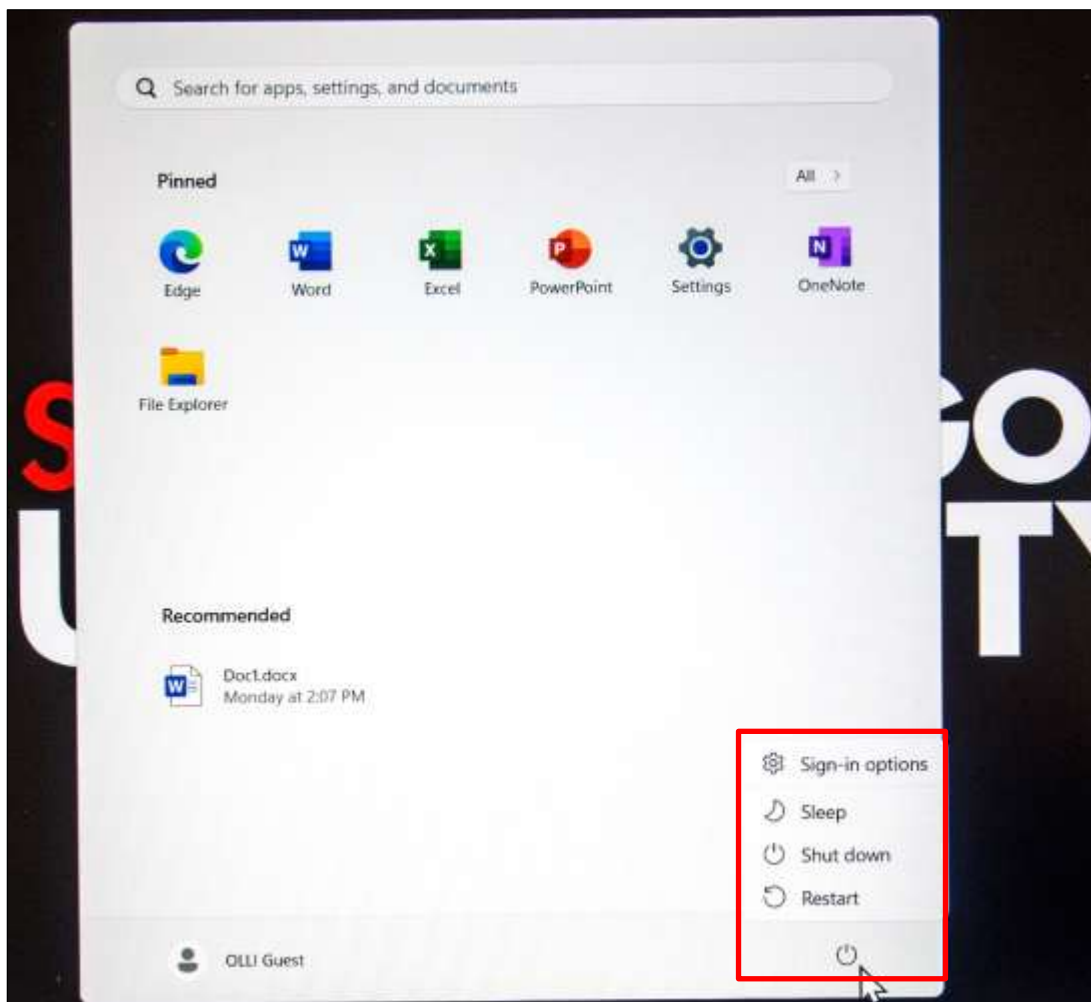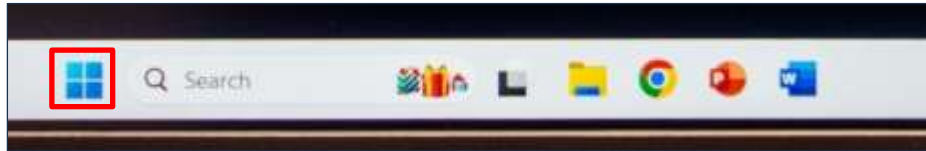
Close the Classroom Laptop and turn off the TV projection system using the Control Screen.

Turning the System Off

It is important that you shut down the system when you are finished using it to lengthen the life of the equipment and conserve energy. Shutting the system down is a simple, two-button process.
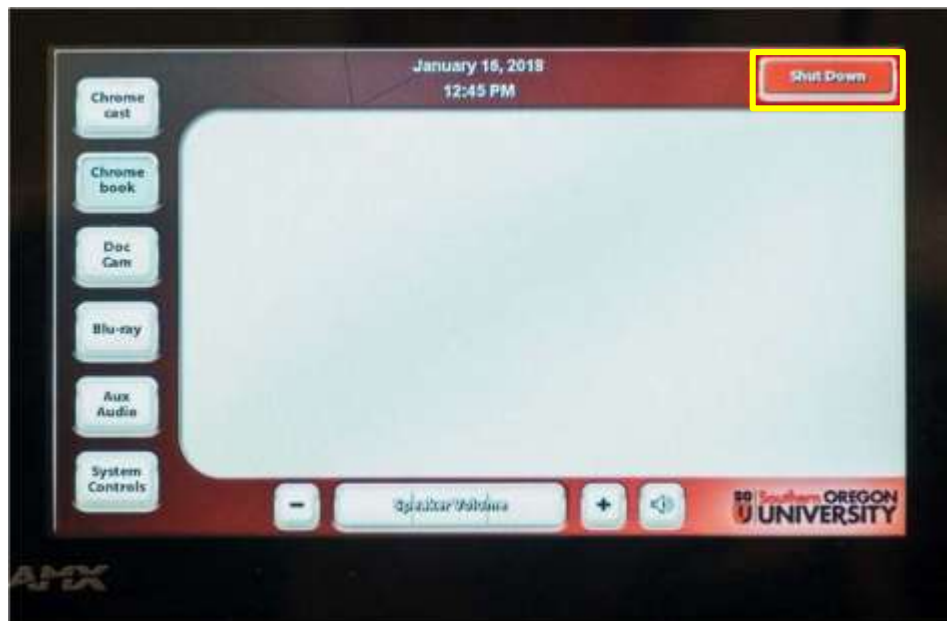
Press the **Shut Down** button that is at the top-right of all of the function screens.
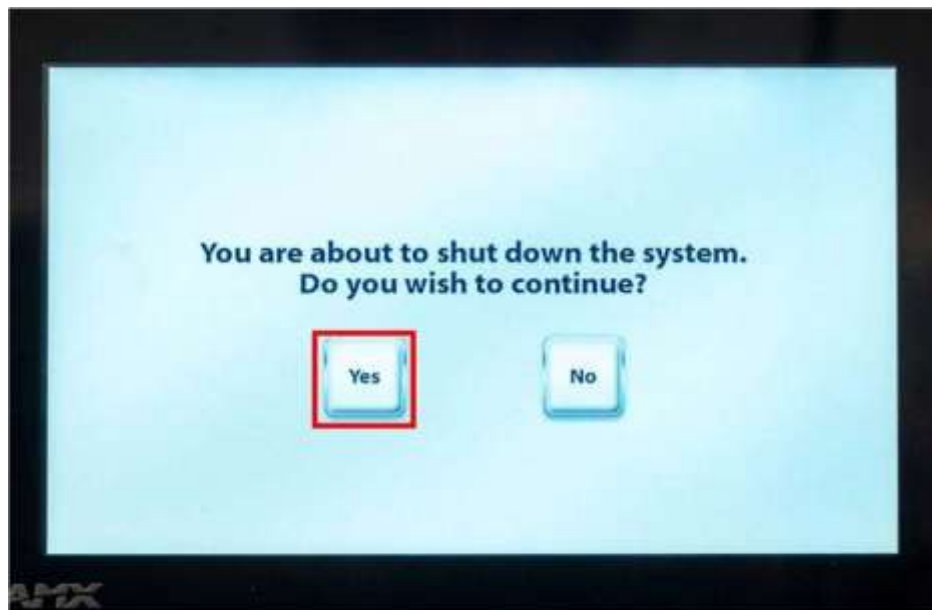
The system will respond with a request to confirm that you want to shut it down. If you want to shut down, press the **Yes** button. If you hit Shut Down by mistake, press the **No** button, and you will be returned to the screen you came from and everything will remain in its previous state.

The shutdown is complete when you have returned to the start screen.

Microphones

The system has two microphones in all the classrooms (except Room B), a wireless **Handheld Microphone** and a wireless **Lavalier Microphone**. Both microphones are connected to the round ceiling (public address) speakers that are installed throughout the room. Microphones are stored in the lower drawer of the podium. If your classroom is equipped with a Lavalier mic, it is recommended that you use it to help your class hear you more clearly and consistently.

You must turn on the microphone to use it.

The wireless Lavalier mic can be used for more consistent pickup of your voice, especially if you move around while teaching. It is kept in the drawer in the podium and needs to be turned on to work. Classrooms C, D and E have microphones that use special rechargeable batteries. If the battery is dead, see the OLLI office for a replacement.

To turn it on, flip the ON/OFF button on the top of the pack. The green power indicator will light. Please remember to turn it off when you are through using it.

To turn on the handheld microphone, press the power button until the green light comes on. Please remember to turn it off when you are through using it.

If the green light won't come on, the mic may need a freshly-charged battery. If the battery is dead, go to the OLLI office for a replacement. The rechargeable battery clips into the bottom of the microphone case.

The volume level of both microphones is pre-set and cannot be changed by users. To make your voice louder move the microphone closer to your mouth or speak louder. To lower the volume, move it away from your mouth or speak softer.

Plugs and Cables

You normally won't have problems with the cables used to connect the classroom laptop to the system but there are two that are accessible and may become unplugged.

Classroom Laptop Cable Connection

The Classroom Laptop has two cables that provide power, USB connections and display output. The two cables are a USB-C for power and an HDMI for video and sound. If the cables are disconnected, both will need to be reinserted.

If you have any problems projecting the Classroom Laptop, be sure the plugs are firmly in place.

Other Cable Storage

There is an HDMI cable in the podium drawer to connect your personal laptop to the video system. If your laptop does not have an HDMI output you will need to provide an adapter to HDMI. (See examples in the Troubleshooting section).

The Aux Audio cable is also stored in the podium drawer. If your audio playback device does not have a 3.5mm output you will need to provide an adapter to 3.5mm.

Room Lighting

Overhead lighting is provided by three rows of lights, in addition to a podium light above the instructor. When entering the classroom, motion sensors automatically turn on the three rows of overhead lights. Alternatively, use the light switch next to the door to turn them on. The podium light must be turned on separately.

Each row of lights has its own switch, located on the wall behind the podium. They also have variable brightness controls that are activated by sliders:

Ceiling Light Bank Switches
(on/off & dimming slider)

Podium Light Switch
(on/off & dimming slider)

Note: If you have turned off the lights (using the pushbuttons) with the switches behind the podium, please turn them on again before you leave the classroom. This will allow the motion sensors to be activated when the next instructor uses the room.

For safety purposes, all lights should be on high when students are entering or leaving the classroom. However, the glare from the lights may be problematic when your class begins. Some suggested settings for the lights are noted below:

Viewing Video

For watching a video:
- All the room lights can be turned off
- Alternatively, the Back Row of lights may be set at a low level

Lecture Presentation

For a presentation, using the TV monitors:
- Podium light can be turned on
- Front Row of lights can be turned off
- Middle and Back lights could be set at lower brightness to allow students to take notes

There is also the option of opening the window blinds in the back of the room.

Consider spending a few minutes getting familiar with these controls. At the start of your lecture, you might also ask for feedback from the students to get an optimal level of lighting.

Troubleshooting

**There is just a desktop image, not my application, on the TV screens**

Sometimes on startup the TV screens will only display the desktop and not the active window. This may result from an issue with the display settings on the laptop.

Classroom Laptop (or other Windows devices):
1) Click on the Windows icon ⊞ at the bottom of the screen
2) In the popup window, select "Settings," then "System"
3) Select "Display" and navigate down to "Multiple Displays"
4) Select **Duplicate (or Mirror) these Displays**
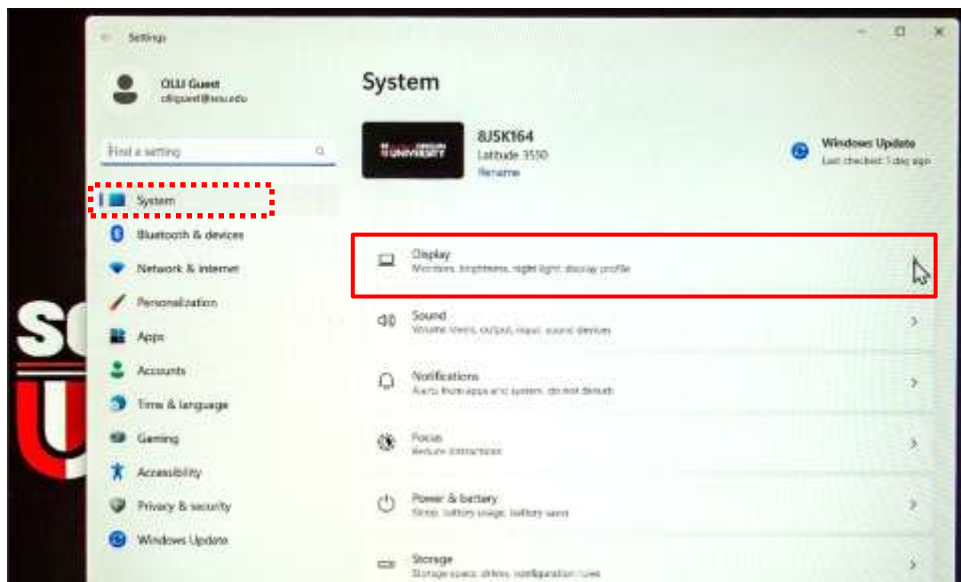
Accessing the Display features
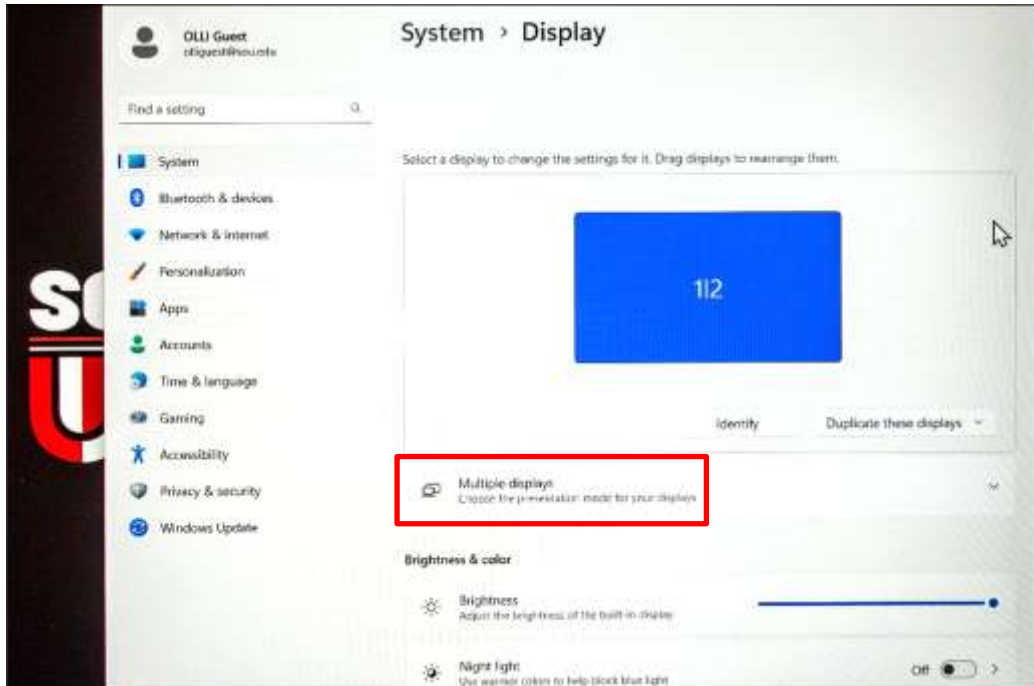
5) The TV screens should now display your screen content.

If you need further assistance, please contact tech support in the OLLI Office.

The Classroom Laptop won't let me access my thumb drive

Your thumb drive must be formatted as a FAT drive (FAT16, FAT32, exFAT). If your drive was formatted in a Mac OSX format it will not be able to be read by the Classroom Laptop.

My device (laptop / tablet / smartphone) doesn't have an HDMI port. Which adapter do I need?

An HDMI cable is used to connect your device to the classroom equipment. If you do not have an HDMI port on your device, you will need an adapter. Cost will range from $5 to $25.

If your device has:	**You will need:**

1. USB-C (Thunderbolt 3) port

USB-C to HDMI adapter

2. iPhone or iPad Lightning port

Lightning to HDMI adapter

3. Mac laptop Thunderbolt or
or Mini DisplayPort

Thunderbolt or Mini DisplayPort
to HDMI adapter

4. VGA port

VGA to HDMI adapter + audio cable

5. USB-A port

USB-A to HDMI adapter

6. Mini or Micro-HDMI port

Mini/Micro-HDMI to HDMI adapter

7. DisplayPort (DP port)

DisplayPort to HDMI adapter

8. DVI port   DVI to HDMI adapter + audio cable

If you need assistance, contact tech support in the OLLI office.

For more information on ports for Apple devices, see https://support.apple.com/en- us/HT201736.

PowerPoint FAQs

How do I open a PowerPoint presentation from a thumb drive?
- Insert your thumb drive into a USB port
- Navigate to your file and click on it
- The PowerPoint app installed on the laptop will open the file

Can I use a remote control "clicker" to advance the slides?
There is a clicker is in the podium drawer. You must insert the USB dongle (also known as a USB transceiver) from the clicker and plug it into a USB port in order to use the clicker.

The laser pointer on the clicker has been disabled. Laser pointers do not work on high-definition LED TVs. The light is absorbed by the TV screen, not reflected by it. What's more, there's some evidence that laser beams may actually harm the TV screen pixels, so we discourage their use in OLLI classrooms.

Is there a way to use "Presenter View" to see my notes and/or the next slide?
The Classroom Laptops have been loaded with a full version of PowerPoint which allows Presenter View. Students will see the complete slide on the TVs.

Acknowledgments