# Simulcast Class Instructions

The steps listed below cover how to connect your laptop to the classroom video camera(s) and microphone. Since you are teaching a simulcast class (i.e. some students are physically in the classroom while other students are participating remotely via Zoom), you will use the classroom video camera(s) and classroom microphone to send video and audio of you and the in-class students to the remote students.

The instructions below will cover the following topics. Please follow these steps, in the order listed below, to ensure the best experience for you and all of your students (in-class and remote students).

- Connecting video and audio cables to your laptop and turning on the Classroom Projector
- Launching Zoom & Connecting Zoom to the Classroom Microphone
- Connecting Zoom to the Classroom Camera(s)
- Best Practices/Reminders

If you have problems during class, please contact the UNIT-Classroom Support Hotline 610-519-5631

## Connecting video and audio cables to your laptop and turning on the Classroom Projector

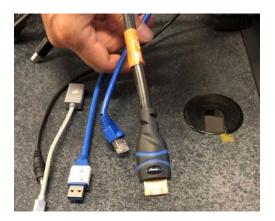
Tips before you enter your classroom:

- Shutdown your computer before coming into your classroom. You will want to connect the cables in the classroom first and then start your computer.
- Please bring the adapters that you typically bring when connecting your laptop to the projector/display.
  - For example, if you have a MacBook that has only USB-C ports, then bring the following adapters
    - USB-C Digital AV Multiport Adapter: This adapter connects the HDMI video cable and the required USB cable to your laptop. <u>Here's an</u> <u>example of an adapter</u>. If you bring this specific adapter, then you do not need the USB-C to USB Adapter below unless you will be connecting an annotation display.
    - USB-C to USB Adapter: This another adapter that connects a 2<sup>nd</sup> USB cable to your laptop. <u>Here's an example of this adapter</u>.
- Bring your laptop's power supply/cable.

1. If the classroom projection system is still on, turn it off. Push the "System Off" button on the room control panel.



- 2. Make sure your laptop is off.
- 3. Connect the HDMI cable to your laptop. Typically, this cable is labeled with an orange sticker.
  - a. If your laptop does not have an HDMI port, please use the HDMI adapter that you brought for your laptop.



4. Connect the USB cable labeled a purple sticker to your laptop.



In some classrooms there may also be a USB cable with a brown sticker. The USB cable with the brown sticker is used for the annotation display and will not provide connectivity to the room's camera(s) and microphone(s) for Zoom.

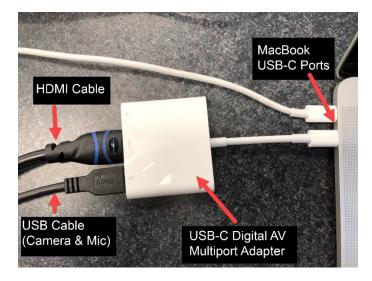
a. If your laptop will not accept this USB cable (purple label), please use the USB adapter that you brought for your laptop.

Note: This cable allows you to connect the classroom camera(s) and microphones to your laptop. Please make sure you connect this USB cable to your laptop, otherwise you will be using your laptop built-in camera and microphone, which will not provide the ideal video/audio experience to your remote students.

Here's is how the cables will look once connected to your laptop (Dell laptop pictured below)



If you are using a MacBook with USB-C ports, here's how the cables plug into the adapter, and the adapter which plugs into the MacBook.



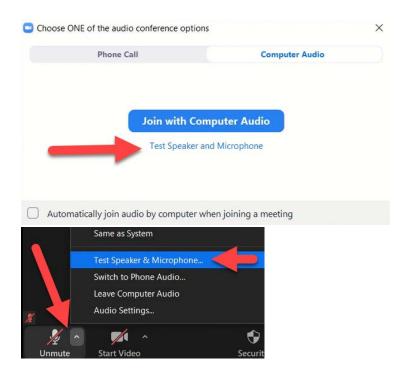
- 5. If your laptop has a wired internet port, plug in the wired network cable into your computer.
- 6. Turn on your laptop.
- 7. Turn on the classroom projection system.
- 8. As your laptop starts, it should display on the projector/display.

<u>Note:</u> If you typically use the extended display setting with your laptop (i.e. the image you see on your screen being different than what shows on the projector/display), then we recommend that you change your display settings to duplicate (Windows) or mirror (Mac) setting. This will make it easier for you to manage the Zoom application within the classroom.

- Turn on video mirroring (Mac) instructions
- Turn on duplicate video settings on Windows 10
  - Press Windows logo **■** key + "P" and then select "Duplicate"

## Launching Zoom & Connecting your laptop and Zoom to the Classroom Microphone

- 9. Launch the Zoom meeting for your class.
- 10. Upon launching Zoom, if you see the "Choose ONE of the audio conference options" window, then please select "Test Speaker and Microphone". (If you do not see this window, then please select the up arrow next to the "Join Audio" or "Unmute" icon, which is the lower left corner of Zoom. Then, select "Test Speaker & Microphone...")



11. You will then see "Do you hear a ringtone?" message. At the sametime, you should hear a ringtone playing. If the ringtone plays through the laptop speakers, then you will want change "Speaker" setting to the classroom speakers. Typically, the classroom speaker is designated with "Display Audio" or "Display Port" in the title. Once you make this change, the ringtone should then play through the classroom speakers. Select "Yes".

The reason is that you want to have the ringtone playing through the classroom is so that when your remote students speak, their audio will come through the classroom speakers instead of the laptop speakers.

You hav	e 4 speakers, now testing speaker 3
Do	o you hear a ringtone?
	Yes No
Speaker 3:	Speakers / Headphones (Realtek Audio) 🗸
	FW430 (Intel(R) Display Audio)
Output Level:	Echo Cancelling Speakerphone (FAL 105 Z
	Speakers / Headphones (Realtek Audio)
Unmute Start \	Same as System Participan

12. You will then see "Speak and Pause, do you hear a replay?" message. The purpose of this message is to make sure you have the correct microphone selected and to confirm the classroom microphone works in Zoom.

Find the "Microphone" field in the message window, and make sure the classroom microphone is selected. Typically, the classroom microphone is designated with "Echo Cancelling Microphone" or "AV Bridge" or "Vaddio" in the title. Select either one of these microphones. Then, start speaking as if you were talking to the class for a few seconds. Zoom will replay this audio back to you so you will hear yourself. Confirm that your audio sounds clear. Then, select "Yes".

	Testing microphone		0
Speak an	d pause, do yo	u hear a rep	olay?
	Yes	No	
Microphone 1:	Echo Cancelling Speak		~
Input Level:	Microphone Array (Realter Audio)		
Unmute Start	Same as System Video	<b>↓</b> Security	Participants

The remote students should be able to hear you and the in-class students speaking. Also, when the remote students talk, you and the in-class students should hear the remote students through the classroom speakers.

To confirm this works, at the start of the class, talk to the remote students and ask if they can hear you. And then have the remote students speak to confirm that you can hear them.

**<u>Reminder</u>**: We recommend that the in-class students do not connect to the Zoom meeting on their laptops. The reason: Having another laptop in the classroom with its microphone and speakers active will cause a bad audio feedback loop for everyone.

If you absolutely need to have an in-class student connect to the Zoom session on their laptop, please have them mute their laptop speaker and keep their laptop microphone muted.

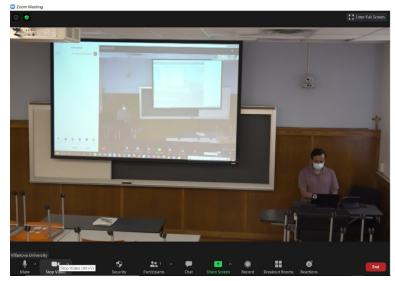
## Connecting Zoom to the Classroom Camera(s)

- 13. Select the up arrow next to the "Start Video" icon, which is in the lower left corner of Zoom.
- 14. Under "Select A Camera", you want to select the classroom video camera. Typically, the classroom camera is designated by the room number plus "Zoom" in the title (FAL 105 Zoom) or "AV Bridge" or "Vaddio" in the title. Select either one of those cameras. Then, select "Start Video".

If you encounter difficulties with the classroom camera, you do have the option to use your laptop's built-in camera.



Then, you will see that you are using the classroom camera rather than the built-in laptop camera.



#### Choosing Rear Camera, Front Camera, or Dual Camera

Depending on the classroom, there might be one camera or two cameras (1 camera facing the front of the room and 1 camera facing the students).

If you are in a classroom with just one camera (rear camera), you can confirm that you are using the rear camera by selecting the "Rear Cam" button on the room control panel.



If you are in a classroom with two cameras, you have the option to use the rear camera, front camera, or use the option called "Dual Camera" which combines the front & rear camera videos into one video shot. To select which video shot you want to use for Zoom, on the room control panel, select "Rear Cam", "Front Cam", or "Dual Cam".



Here are examples of what each video shot looks like:

Rear Camera (instructor video)



Front Camera (in-class student video)



Dual Camera (combines the video shot from Rear & Front Camera)



### **Best Practices/Reminders**

#### Sharing your Screen

 Remember, in order for the remote students to be able to see what you are displaying on your computer (e.g. PowerPoint slides, PDF, Website), you will need to share your screen using the "Share Screen" feature within Zoom. The in-class students will see what is displaying on your laptop because your laptop is connected to the projector/display. Learn more about Zoom Screen Sharing.

### Using Annotation Displays (Wacom)

• If you are using an annotation display to write text, you can use the classroom annotation display with Zoom's built-in <u>whiteboard feature</u>.

## **Interacting with Remote Students**

- Decide how you want the remote students to indicate that they want to speak to you and the in-class students.
  - Consider having students use the <u>"Raise Hand" feature and other non-verbal</u> <u>feedback features</u> in Zoom to indicate that they have a question or want to speak
  - Periodically, ask the remote students if they have questions or do they understand the topic that was just covered. This help the remote students feel engaged or comfortable to ask questions.
- Decide how you will be using the Chat feature: Is that something you want to monitor during the class for questions? If so, decide how often you will be checking the chat for questions and make it clear to the remote students how often you will be checking the chat.
- Reminder: by default, Zoom will not allow students to share their screen without host permission. If you'd like the remote students to share content, in Zoom select "Security" and select "Share Screen".

## Group Work/Breakout Rooms

- If you want to have students engage in group work, we recommend that you utilize Zoom breakout rooms so that the remote students can speak with each other without their audio conversations playing on the classroom speakers (while the in-class students are also engaging in group work)
- More information about Zoom breakout rooms can be found on the <u>Zoom breakout</u> <u>rooms page</u>.

## **Recording Your Zoom Session**

- If you will be recording the simulcast class, please remember to click on "Record" within Zoom and select "Record to the Cloud" at the start of the class.
- Remind students that you will be starting the Zoom recording.