

Classroom Technology Options Fall 2021

Options:

Lecture Capture Hardware

- Live Streaming is not an option for classroom recorders
- Recordings are automatically published to Kaltura, the campus video distribution platform, for sharing:
 - with anyone on campus via a restricted MediaSpace channel;
 - with a class or department via a closed and protected MediaSpace channel;
 - with a class in a Compass2g or Moodle course space;
 - anyone via a link on a webpage or by email;
 - publicly in a gallery or via an embed code on a website.
- Advantages
 - Students can view the recording multiple times at a time and pace convenient for them.
 - Content can be limited to the students in the course or specific netids.
 - No need for instructor provided equipment.
 - Highest quality audio and video processing.
 - All projected content is recorded (PC, Document Camera, Laptop, BluRay, etc.).
 - Recording is automated.
 - Publishing is automated.
- Challenges
 - Limited number of rooms with a camera connected to the recorder.
 - Streaming the session live will still require Zoom or Skype for Business.
 - Scheduling recordings requires two business days' notice, but a semester of recurring events can be scheduled at one time.
 - No synchronous participation available for remote students.
- Summary
 - This is the best option for high quality audio and video with the least effort for faculty if they do not need remote students to participate synchronously.

Resident PC with Audio Bridge

- Streaming with Zoom or Skype for Business
 - Manually stream content from the PC to remote students during a live Zoom or Skype for Business session (both available on the PC).
 - Microphone is provided.
 - Can also record the meeting (this is recommended to improve the student experience).
- Recording with Zoom or Skype for Business
 - Manually record content from the PC to the cloud in a Zoom or Skype for Business session with or without remote students in the recorded session.
 - Microphone is provided.

- Advantages
 - No need for instructor provided equipment.
 - Higher quality audio and video processing than DIY.
 - Can be used in combination with lecture capture hardware (if available) for streaming.
 - Allows remote students to participate either synchronously or asynchronously.
- Challenges
 - Remote students watching the live stream require interaction to remain engaged.
 - Effort required to manage the live collaboration session (set up meeting, monitor chat, etc.).
 - Document camera needs to be plugged into the PC to record content.
 - Cannot stream or record content from your laptop or the BluRay player (if present).
 - Limited to the licensed software available on the PC (Zoom and Skype for Business).
- Summary
 - This is the best option for quality audio and video using the equipment in classrooms for instructors who need remote students to participate synchronously.

DIY

- Streaming (Zoom, Skype for Business, etc.)
 - Manually stream content from instructor's laptop to remote students during a live session using the collaboration software of choice.
 - Instructor provided microphone.
 - Instructor provided camera.
 - Can also record the meeting (this is recommended to improve the student experience).
- Recording (Zoom, Screencast-O-Matic, Kaltura, Camtasia, etc.)
 - Manually record content from the instructor's laptop to the cloud using the software of choice with or without remote students in the recorded session.
 - Instructor provided microphone.
 - Instructor provided camera.
- Advantages
 - Familiarity with personal laptop.
 - Can be done in any classroom.
 - Can be used in combination with lecture capture hardware (if available) for streaming.
 - Allows remote students to participate either synchronously or asynchronously.
- Challenges
 - Remote students watching the live stream require interaction to remain engaged.
 - Effort required to manage the live collaboration session (set up meeting, monitor chat, etc.).
 - Instructor provides equipment including microphone (a good quality external microphone is recommended).
 - Quality of audio and video processing may be less than optimal depending on equipment.
 - Cannot stream or record content from the classroom PC, document camera, or BluRay .
 - Effort required to manage the live collaboration session (set up meeting, monitor chat, etc.)
- Summary
 - This is the best option for instructors who want the flexibility of using their own equipment and software of choice in any classroom.

Definitions:

Lecture Capture Hardware – classroom with hardware recording all content presented at the projector along with audio from the classroom microphone. Most rooms do not have a camera.

Resident PC with Audio Bridge – classroom with personal computer (PC) and microphone for recording and/or streaming content from the PC only.

DIY (Do-It-Yourself) – instructor brings laptop or other mobile device to the classroom for recording and/or streaming content from the laptop only.

Streaming (simulcasting, synchronous) – remote students can participate at the same time as students in the room. Please note our experience is that students complain heavily about the need to view a live session unless there is a good deal of interaction. Simply watching a live stream results in very negative student commentary and feedback.

Recording (asynchronous) – content available after classroom instruction. Please note that our general experience and statistics show the students prefer to watch on their own time and at of speed faster than 1X. There are ways to ensure a student is watching on demand videos, these can include a quiz in the middle or the end of the lecture to confirm that they saw the content, or in most cases the viewing analytics will show that a student has watched the recording

Resources for DIY:

The Undergraduate Library Media Commons (<https://www.library.illinois.edu/mc/>) has equipment available for instructors to check out for the semester. This includes USB microphones, USB cameras, and portable document cameras.