# Tools for using screen annotation and handwriting

Computers and some tablets with touch screens can be used for creating video recordings or teleconferences with on-screen markup, such as mathematical formulas.

### Deciding what to use

If you need to create only a few quick recordings with writing or a live teleconference with writing, you can:

- use your existing computer with Zoom and use the mouse (or touchpad) to draw or write
- use an iPad or Chrome tablet and the whiteboard feature of the Zoom app to draw with your finger or a rubber-tipped stylus
- use your phone to record a video of your writing on paper while you narrate
- use the Zoom app on your iPhone and draw with your finger or a rubber-tipped stylus

If your class extensively uses drawing and writing for math or chemical formulas or similar material, we recommend one of the following:

- an Apple iPad with the Zoom app's whiteboard feature and an Apple Pencil
- a computer with an attached Wacom drawing tablet using Zoom and the whiteboard feature
- a computer with integrated stylus functionality (such as the Google Pixelbook, more recent Windows Slate devices, or a laptop with writing capability, like the Microsoft Surface)

If you need to extensively create videos or teleconferences that include drawing math equations or formulas and similar material, we do not recommend devices with a touchscreen and using a finger or rubber-tipped stylus - with this method, it is difficult to create accurate and legible writing or drawing.

The instructions below outline how to use some devices for writing-based recordings or teleconferencing with Zoom.

#### Instructions for Zoom

Zoom has online instructions for writing annotations in teleconferences and recordings at this link - note that different instructions for Windows, Mac, Android and iOS are at the bottom of the document. Note that Zoom can be used to create video even if you are not conferencing with anyone.

https://support.zoom.us/hc/en-us/articles/115005706806-Using-annotation-tools-on-a-shared-screen-or-whiteboard

# Apple iPad

Apple iPad devices running the current iOS and capable of using the Apple Pencil can be used. A list of models that can use the Apple Pencil are here.

Note that iPads without an Apple Pencil can also be used with the methods outlined below; however, using your finger or a rubber-tipped stylus for writing may not provide you with the control you need to write legibly.

Zoom's general guide to using the iOS version of their app is at: https://support.zoom.us/hc/en-us/articles/201362993-Getting-Started-with-iOS

#### Meeting or recording with written material only

To make a shared video recording or live conference in Zoom containing only your handwritten annotations, open the Zoom app and start a meeting. You may wish to join the meeting with the "Audio Only" option, since your iPad camera may not be at an angle for showing you while you are writing on the screen.

In the session, tap the "Share" icon at the top of the screen and choose the "Whiteboard" option. This will show a blank screen you can write on, with icons at the bottom to change colors and thickness of the pen and to erase.

If you wish to record and share the meeting with students, tap the menu on the upper right where you see the three dots and choose the "Record" option. This will record what you see on the screen and any audio during the conference. Tap the menu again to end the recording and you will receive an email with a link to the recording you can share with students. Students can watch the stream of the meeting with any device and have the option to download it as a small mp4 movie file.

#### Meeting or recording with written annotations on a presentation

In Zoom on the iPad, you can share your screen during a meeting, showing apps on your tablet, such as a PowerPoint or Keynote presentation.

When you tap the option to share the screen, you will see a pop-up from the iPad - select "Zoom" as the option to record the screen, then use the presentation or other app as you normally would. If you are using Keynote, for example, holding the pen or your finger on the screen as you present will bring up a pop-up menu that lets you write on the screen in different colors.

### Apple iPhone

The Zoom app on the iPhone includes the capability to share your screen, photos, or presentations with apps and to draw with your finger on the screen. The interface and instructions are similar to the iPad app.

Zoom's general guide to using the iOS version of their app is at:

https://support.zoom.us/hc/en-us/articles/201362993-Getting-Started-with-iOS

# **Google Chromebook**

Google's touchscreen Chromebook will allow you to do simple drawing using your finger or a stylus in recordings and video conferences.

A general guide to using the app is located here:

https://support.zoom.us/hc/en-us/articles/213298746-Getting-Started-On-Chrome-OS

# Google Pixelbook and Slate

Most PixelBook and Slate devices from Google can use a stylus for drawing, in addition to their touchscreen. Drawing with a whiteboard is available in the Zoom app for recordings and teleconferences.

Download Zoom for Chrome here:

https://chrome.google.com/webstore/detail/zoom/hmbjbjdpkobdjplfobhljndfdfdipjhg?hl=en-US A general guide to using the app is located here:

https://support.zoom.us/hc/en-us/articles/213298746-Getting-Started-On-Chrome-OS

#### **Android Phone**

Zoom's Android phone app only offers options for joining and participating in meetings. The app does not include whiteboard and drawing capabilities. There is an option to chat directly with a contact outside of a Zoom meeting. Click the pencil icon in the upper right corner for this feature.

#### **Microsoft Surface**

Microsoft's more recent Surface devices are Microsoft-branded thin laptops running Windows with a touchscreen and stylus capability. These devices use the same version of Zoom available on Windows or

Mac desktops and laptops and include drawing and whiteboard capabilities.

General information on using the Zoom application on Windows devices is located here: https://support.zoom.us/hc/en-us/articles/201362033-Getting-Started-on-Windows-and-Mac