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## Introduction to Zoom for Teaching

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# Introduction to Zoom for Teaching

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## Abstract

This document presents an introduction to the basic tools of teaching with Zoom.

## 1 Introduction

Throughout these notes, we will illustrate the use of the Zoom Web Portal, the use of the Zoom desktop application, and the use of either of the previous two with an iPad. We use an iPad 7th generation with a 1st generation Apple pencil. Not sure how the process differs from a Windows tablet, but we would think it will look similar. Except when we illustrate the use of the iPad, we think the main process will benefit both Apple and Microsoft Windows users. The structure of these notes is divided into four parts: the first part consists of putting in place the settings and is given in Section 3. The second part describes the use of the tools to take advantage of while teaching with Zoom and is given in Section 4. The third component informs on an alternative way to schedule/start a meeting (and use other features) using the Zoom desktop application, if not interested in using the Web Portal and is given in Section 5. Finally, the fourth part outlines how to integrate Zoom with your course in Canvas. This is given in Section 6. Note that when the settings are put in place through the Web Portal, they are also in effect when using the desktop application. The readers not interested in a certain section can freely jump to the section they are interested in.

## 2 Zoom First Time Users

If this is your first time to use Zoom as an instructor or if you haven't organized a meeting with Zoom, you need to create an account. Please go to <https://zoom.us/>. Click on **SIGN UP** then follow the instructions to create your Zoom account. *Please use your Geneseo email so that you have all the great features of the software, since Geneseo has a Zoom license. With your own free account you will not be able to have most features that will allow you to better teach.*

## 3 Adjusting the Settings Using the Web Portal

Now that you have a Zoom account, please go to <https://zoom.us/> and click on **SIGN IN**. Use your Geneseo email address and the password you used to create your account (not necessarily the same as the Geneseo one) to access your *Profile*. Feel free to edit your profile or add a picture if you wish...

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### 3.1 Scheduling Meetings Settings

On the menu to the left of the page, under *Profile*, click on **Meetings**. To schedule a meeting, click on **Upcoming Meetings** and then on **Schedule a New Meeting** right below **Upcoming Meetings**. On the page that opens, fill in the information for your meeting. Of particular attention we would consider enabling following settings:

- **Time Zone:** Make sure the Eastern time is selected.
- We would select the **Recurring meeting** option located just below Time Zone. Then specify the recurrence and the end date. Doing so will allow you to schedule all meetings of your classes for the whole semester, so you don't have to do it one by one.
- Under **Video**, we would select *off* for both the Host and the Participant. The reason is to let everybody to choose to turn their video on...
- Under **Audio**, we would select the *Telephone and Computer Audio* option. This allows participants to join either with their computers or with their phones.
- Under **Meeting Options**, we would select *Enable join before host*. This is probably good for students who come early to class. They can already join the meeting before you start...

After selecting all necessary options for your class, click on **Save** at the bottom of the page.

#### 3.1.1 Adding meetings to Calendars and emailing links to attendees

After you have saved your meetings options, please go back on top of the page under **Time** just below *Topic*. Then click on the **Google Calendar** tab. Select your Geneseo email address from the new page that opens and use your password to login. On your Calendar meeting page, click on **Guests** to the right side of the page, then in the *Add guests* box, you can add email addresses of your attendees. Once done, click on **Save** at the top middle of the page. Follow the instructions on the next message boxes that will ask if you want to send invitation to your guests or not...

Another way to send links to your attendees is to go a little below *Time*, under **Invite Link**, click on **Copy Invitation** to the right corner. Then go and paste the link into your email message box and send to your attendees...

#### 3.1.2 Edit/Start/Delete this Meeting and Save as a Meeting Template

If you want to Edit or Start or Delete the meeting you just created, please go to the bottom of the page and click on the appropriate item.

Of course there are other options, please select what you want to do in your course. The items above are just our suggestions, they are optional.

### 3.2 Recording Meetings Settings

On the main menu to the left of your screen, select **Settings**, then click on **Recording**. Next, enable the **Local recording** button if you want to record the meeting to a local file and give

your attendees the same privilege. See Section 4.2.3 on how to choose where to save and locate your recordings.

If you want to record meetings automatically when they start, select the **Automatic recording** button located below *Local recording* and *Cloud recording*.

There is another option for recording: **Cloud recording**, but it appears to be locked by Admin...

### 3.3 In Meeting Settings

Click on **Settings** on the main menu. Under **Meeting**, select **In Meeting (Basic)**. Then select all options you want to include for your course. In particular, you may want to enable

- **Chat:** to allow attendees to send a message visible to all participants.
- **File transfer:** to allow Hosts and attendees to send files through the in-meeting chat.
- **Co-host:** Allows you to add co-hosts who will have the same in-meeting controls as you, the host.
- **Screen Sharing:** Allows you and your participants to share their screen or content during meetings. If you want your students to share their screen or content of their work, you might want to select **All participants** under **Who can share?**. Otherwise, select **Host only**.
- **Annotation:** Allows you and your attendees to use annotation tools to add information to shared screens. **This is especially great when you want to write on pdfs that have examples and definitions preprinted...** In this case, it will also be a good idea to select **Allow saving of shared screens with annotations**.
- **Whiteboard:** Allows you and attendees to share whiteboard during a meeting. **If you have an iPad or a Tablet, you may use this Whiteboard to teach just as you used to do with a classroom whiteboard/blackboard.** In this case, select **Allow saving of whiteboard content**, so attendees can have access to that at any time after the meeting. Please refer to Section 4.2.1.5 to see how to use the Whiteboard on an iPad.
- **Breakout rooms:** This will allow you to split the meeting attendees into separate, smaller rooms. **This is particularly useful if you use group work in your class. You can split the class into smaller disjoint groups. The good thing is that you can join any of the groups, discuss, share a document with members, etc. If you are done with your group work, you can stop the splitting and have everyone back to the main session.** See Section 4.2.4 for more.

## 4 Actual Teaching

### 4.1 Start a Meeting

Here we assume that the speaker has already created a link for the meeting, the attendees have received the link to access the meeting, and everyone has already accessed the meeting. If you haven't scheduled your meeting yet, please refer to Section 3.1.

To start your meeting, click on **Meetings** on the main menu to the left of your screen. Under **Upcoming Meetings** and below **Schedule a new Meeting** are all your upcoming meetings listed. Click on the **Start** button of the appropriate meeting you want to start.

## 4.2 During the Meeting

After you click on the **Start** button as explained above, you enter the Zoom main screen. For your information:

- To the right top corner of the screen is the **Speaker View/Gallery View** where you change how you want to view attendees videos.
- Right after the Speaker View/Gallery View is the **Enter Full Screen** icon if you want to go full screen.

At the bottom of your screen are several icons that we will outline now and in the next sections:

- The first icon (from left to right of the screen) is the **Mute/Unmute** button that allows you to control the audio.
- **Start Video/Stop Video** button allows you to enable your video so that others can see you or hide your video to prevent others from seeing you.
- Within **Security** button, you can *lock the meeting, Enable Waiting room, allow participants to share screen...*

### 4.2.1 Share Screen

To share your screen with participants, click on **Share Screen** folder. But first, note that you can use the top little arrow by the side of the **Share Screen** folder to control the sharing settings if you haven't done that as we explained earlier. For example, you can choose whether one participant can share at a time or multiple participants can share simultaneously...

**4.2.1.1 Sharing an internet site, a pdf document, a Word document...** Once you click on the **Share Screen** folder, a new window opens. Click on **Desktop 1** window under **Basic** and select **Share** at the bottom of the screen. This will allow you to share pretty much every document opened on your machine (websites, emails, pdfs, Word documents, MATLAB,...) except a few of them, in particular, the Whiteboard window, the iPhone/iPad window. Alternatively, you can directly select the document you want to share. In this case you will only be able to share document of the same format. For example, if you select to share a pdf document that is open on your machine, then you will be able to share other pdf documents during the same sharing time, but you will not be able to share the MATLAB Command Window or a website, for example. You will have to stop sharing and repeat the process to share a document of a different format, or you could simply click on **New Share** (The Share Screen folder becomes **New Share** while on sharing mode).

**4.2.1.2 Sharing the Whiteboard** Still under **Basic**, click on the **Whiteboard** window and then on **Share** at the bottom of the page to share the whiteboard. It comes with a menu that will allow you to write, draw, erase, clear, etc. But it's not fun on a laptop. It's more interesting on a tablet or an iPad. See Section 4.2.1.5 to learn how to use it on an iPad.

**4.2.1.3 Sharing an iPhone/iPad** Again, under **Basic**, click on the **iPhone/iPad via Air-Play** window and then on **Share** at the bottom of the page. Then follow the instructions on the screen. It will ask you to install once and for all a plugin requires for the pairing. This option allows you to share everything you have on your iPhone/iPad. Another option is to select the **iPhone/iPad via Cable** window and then on **Share** at the bottom of the page. The sharing is the same as via Airplay except that here you need to use a cable to connect your iPhone/iPad with your laptop.

This is especially useful if you want to write on documents (pdfs, for example) that have examples/theorems/definitions preprinted using a pencil. In the case of a pdf document for example, all you need to make sure is that you have *Acrobat* installed on your iPad. Then open your pdf with *Acrobat*. Next, to the right bottom corner of the screen is the *Pencil icon*. Click on that and select the *Comment* icon. A menu bar will appear on top of the screen. Select the *Pencil icon* and enjoy the writing with your pencil. Your attendees will visualize everything you are writing.

In order to access the **Whiteboard** on your iPhone/iPad, you may need to join the meeting. To do that, go to the Zoom home screen from the desktop application installed on your iPad/iPhone. Click on the **Join** button. Then use either the Meeting ID or a personal link name for the meeting. You can obtain the Meeting ID by clicking on *Participants* from the main menu of the host screen and then on *Invite* at the bottom of the new window that opens. The meeting ID is located on top of the new window that pops up above **Contact** and **Email**.

Once you have joined the meeting with your iPhone/iPad, make sure to give yourself the co-host privilege on the iPhone/iPad, which you can do by clicking on the *Participants* icon from the host screen, then under **More** to the right corner of your name. This will allow you to have all the sharing privileges as the host. Next, go to the top right corner of your screen and click on **Share Content**. The options available to select are: Screen, Photos, iCloud Drive, Dropbox, Microsoft OneDrive, Google Drive, Box, Website URL, Bookmark, and Whiteboard. We are going to focus on **Screen** and **Whiteboard**.

**4.2.1.4 Sharing Screen on iPad** Click on **Share Content** then on **Screen** (first item on the list). Finally click on **Start broadcast**. This is screen broadcast. Everything on your screen will be recorded. You are all set to share any document with your attendees. For example, you may share a pdf document, a powerpoint document, a word document, an email, or whatever is open on your machine.

**4.2.1.5 Sharing Whiteboard on iPad** Click on **Share Content** then on **Whiteboard** (the last item of the list). Once you enter the Whiteboard, you will notice that at the bottom of the screen is the Whiteboard control bar that allows you to switch from the default color (black) to another color (red, yellow, green, and blue), and do many other things. A picture of the Whiteboard is given in Figure 1.

Click on the **Pencil icon** to start writing. At any step of your writing,

- click on the **Redo/Undo icons** for redo and undo actions.
- Use the Eraser icon to erase.

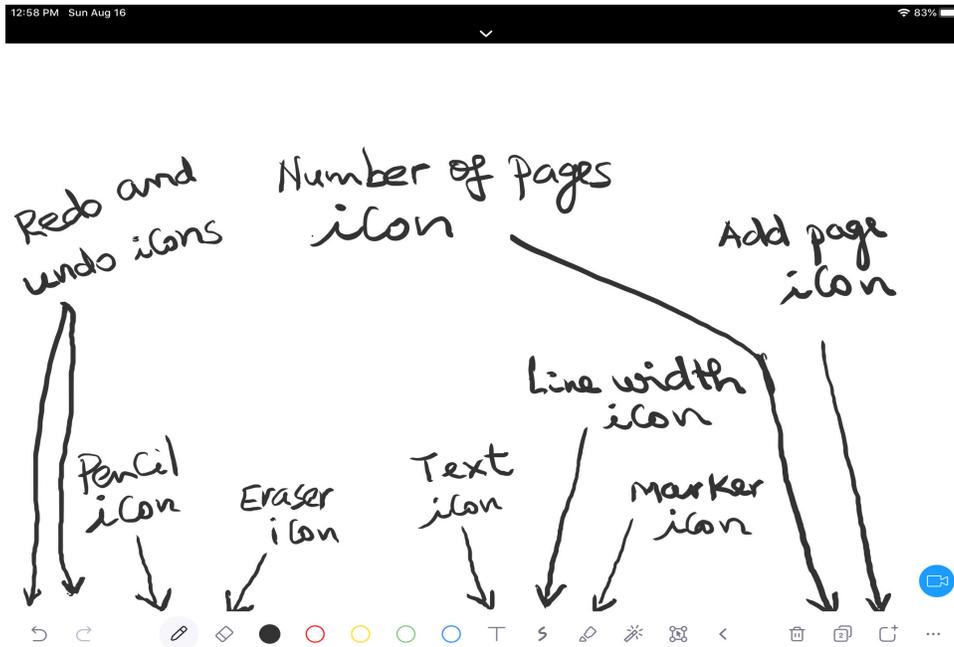


Figure 1: A picture illustrating Zoom Whiteboard on iPad

- Select your favorite color (red, yellow, green, or blue) by clicking on the colored rounded buttons.
- Select the **Line Width icon** to change the line thickness.
- Use the **Add Page icon** to add a new page. When you have at least two pages, the **Number of Page icon** will be displayed.
- Use the **Number of Page icon** to move backward/forward through the pages.
- If you are interested in keyboard text-type writing, use the **Text icon**.
- For marker writing, use the **Marker icon**.
- To save your Whiteboard session, you may click on the **three dots ...** following the **Add Page icon**.
- To delete an entire page or all Whiteboard drawings, click on the delete icon.

**4.2.1.6 More Features on the iPad** For features on the iPad such as **Chat, Meeting Settings, Minimize Meeting, Virtual background, Connect/Disconnect Audio**, click on the **More** menu icon (three dots ...) to the top right corner of your Zoom home screen.

#### **4.2.2 Sharing a portion of a screen. Sharing Music or Computer Sound only. Sharing Content from 2nd Camera**

Click on **Share Screen** folder. Next, select **Advanced** located just after **Basic**. Then click on the appropriate window you want...

### 4.2.3 Recording a Meeting

Click on the **Record** button at the bottom of the screen right after Polling. While the record is ongoing, you may pause/stop it at any time. The recording will be converted into an mp4 file when the meeting ends. To set up where you want your recording to be stored, click on the top little arrow by the side of **Start Video/Stop Video** icon from the main menu at the bottom of the main screen. Then click on **Video Settings**. On the new page that opens up, select **Recording**. You can go ahead and set up a path through **Store my recording at** box.

### 4.2.4 Breakout rooms

As outlined in Section 3.3, breakout rooms are very important for **group work**. Breakout rooms allow attendees to meet in smaller groups, and are completely isolated from the main session in terms of video and audio. Click on the **Breakout Rooms** icon from the main menu at the bottom of the screen. On the new tab, select **Automatically** (or **Manually** if you want more work :) ). Then click on **Create Breakout Rooms**. Note that you can move people around after the rooms are created automatically... You can also broadcast a message to all and students in any breakout room can ask you a question. Once you close the breakout rooms, everyone gets back to the main session. For more tips on how to use breakout rooms, please watch this Youtube video <https://www.youtube.com/watch?v=NVudVCrWvpE>.

### 4.2.5 Breakout Rooms not Available if Hosting a meeting on an iPad?

It appears that on the 7th generation iPad there is no **Breakout Rooms** option when I host the meeting from the iPad. One way I would go around this, is always to host the meeting on a laptop (if I want to do group work), then share the iPad through the laptop as explained in Section 4.2.1.3. This allows me to use group work via the breakout rooms option on the laptop and at the same time write on the whiteboard with an Apple pencil or even write comments on pdf documents on the iPad...

Alternatively, if you don't want to share your iPhone/iPad through the laptop, you may join the meeting with both your laptop as a host and your iPad/iPhone (using the meeting ID or link, with the same Zoom account) and then grant yourself a co-host privilege on the iPhone/iPad to have all the sharing options that the host have. **This is also what you could do if you have a Windows laptop and an iPad, since the compatibility of the two devices might be problematic.**

## 5 Using the Desktop App Installed on your Machine

If you don't want to schedule/start/delete your meeting on the web portal as explained in Section 4.1, you may use the Zoom desktop Application that you have installed on your machine. The application looks similar on both the MacBook Pro and the iPad. All you need to do is to click on the application icon on your machine. Once the application opens, you have the options to Schedule a meeting, join a meeting, share screen under the menu **Home**. Other menu items include the **Chat** button, the **Meetings** button, and the **contact** icon. Click on any of the menu buttons to accomplish your appropriate task.

## 6 Zoom Integration With Canvas

Please go to `canvas.geneseo.edu` to login to your account. Once inside Canvas, click on **Dashboard** to the left side of the page. Click on any course you want to set Zoom up. On the new screen, on the menu to the left of the screen, click on **Settings**. On the new screen, click on the **Navigation** tab. Scroll down the page and within the second table, drag the Zoom program and drop it at any location inside the first table. Then click **Save** at the bottom of the page. You will notice that the Zoom link will appear on the menu to the left of your screen.

Now, click on the Zoom link. On the new page that opens, click on the **Schedule a New Meeting** button located to the top right corner of the page. Fill in the information for your meeting as we explained in Section 3.1.

Next, click on **Upcoming Meetings** to see all of your scheduled meetings. Finally, click on the **Start** button to the right corner of the row containing your desired meeting information. This will open up the Zoom main screen. You can now use all the information of the previous sections to handle your meeting.

For your information, recently, *James Kernan* of the *Department of Geography* used the Zoom integration with Canvas to show how you can schedule office hours. If you missed his email, you can watch the following two videos

[https://www.youtube.com/watch?v=w10C9gjN2\\_c&feature=youtu.be](https://www.youtube.com/watch?v=w10C9gjN2_c&feature=youtu.be)

and

<https://www.youtube.com/watch?v=C5Ezo8Wxv0s&feature=youtu.be>.

## References

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