Notes, Links, Tips, and Instructions for Working Remotely

Note: in some cases, this document tells you what you can do, but not always how to do it. If you decide you want to use a function and don't know how, please contact me and I will develop specific instructions or meet with you online. --Jeff

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Links:

- **See** best practices for working remotely (OIT)
- **Microsoft Teams** channels help workers engage in day-to-day discussion about work.
    - https://oit.colorado.edu/services/messaging-collaboration/microsoft-office-365/help/teams
- **Zoom Conference Calls:**
    - https://oit.colorado.edu/services/conferencing-services/web-conferencing-zoom
- **Remote instruction guidance:**
    - https://oit.colorado.edu/support/academic-technology-resources-teaching-continuity
- **Additional university resources**:
    - https://oit.colorado.edu/services/voice-communications/voicemail
    - https://oit.colorado.edu/services/network-internet-services/vpn
    - https://oit.colorado.edu/services/messaging-collaboration/microsoft-office-365/help/exchange-online
- **A&S Office Coverage Policy:** https://www.colorado.edu/asfacultystaff/personnel/policies-procedures/staff-classified/office-coverage-policy.

Collaboration via Microsoft Teams:

Use Microsoft Teams for instant messaging and video conferencing among work groups. You can use it via a browser, downloaded desktop app, and on the Teams app for all your mobile devices. At this time, OIT is requesting you favor Microsoft Teams for meetings and group collaboration over Zoom to reserve Zoom licensing for instructional use. Microsoft Teams offers the same collaboration features offered by Zoom as well as additional unique features that integrate with Office 365 applications (plus more you may not have known were available). Be sure you are on the latest version of Office.

You can have OIT set up a new Teams group for you: Request a Teams Group

Quick Reference:
Learn More about Teams

Quick Start for Teams
Adding Teams to a Meeting Invite
Schedule a Meeting in Teams
Join a Teams Meeting
Virtual Teams Workshops

Sharing you desktop

Jeff is working on getting Teams groups set up to make it easier to collaborate. The first set of groups will be called GEOG-Kesda-Instructors, GEOG-Staff-Team, GEOG-Grad-Reps.

Conducting Class Lectures with Zoom

NOTE: An external microphone, a headset with a microphone, or headphones/earbuds with a microphone will deliver much better sound for your students. A laptop microphone might be tough to listen to for an hour.

1) Install the desktop Zoom app if you haven't already (it's helpful for scheduling and hosting meetings). Note that this takes a few minutes to set up so best to do it well beforehand:
- Download the Zoom application
- Click the Sign In with SSO button
- Enter "cuboulder" and click continue
- A browser window will open prompting you for your Federated Identity Service identikey and password credentials. Click Continue.
- This will automatically create your account and log you in.

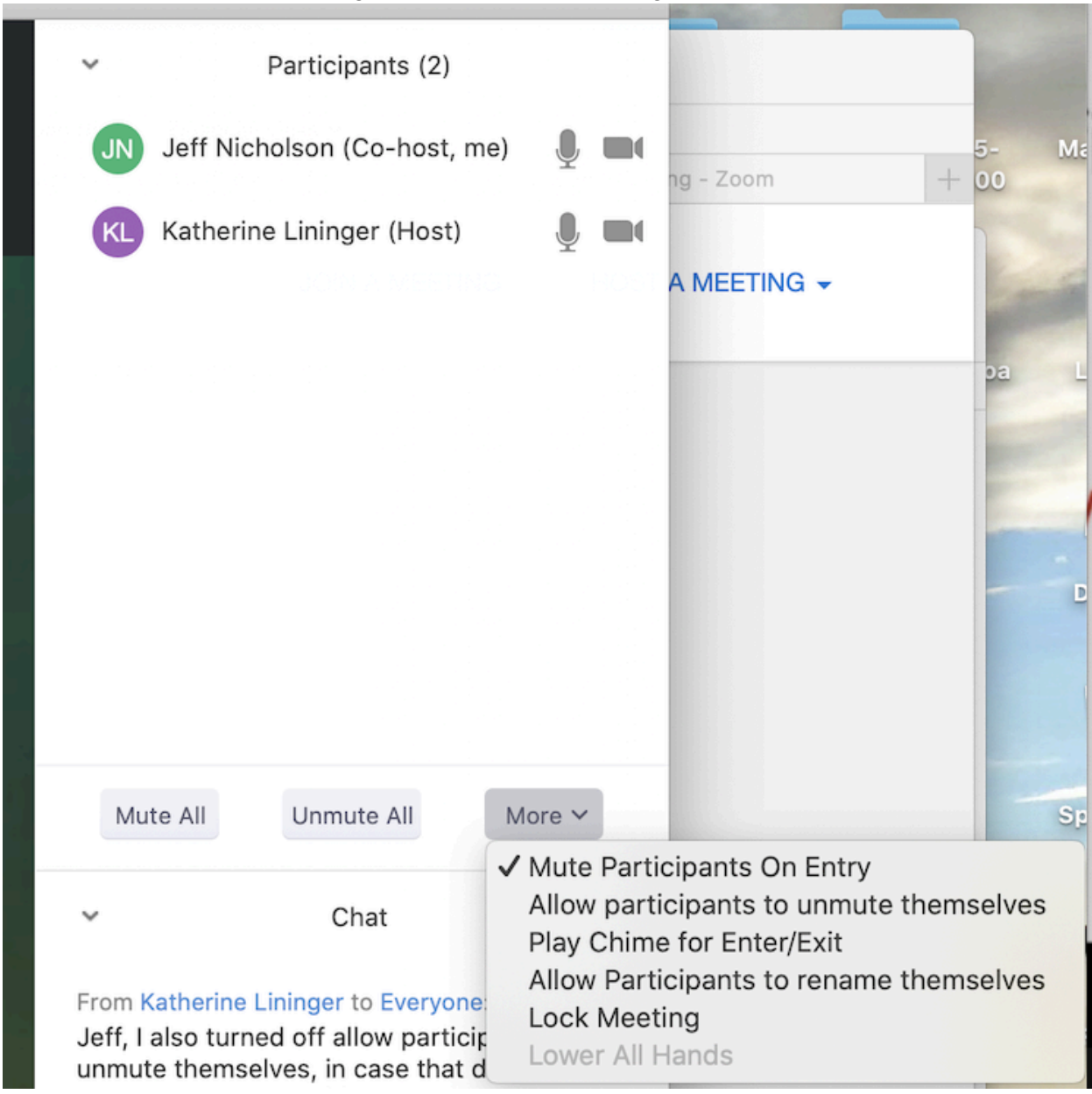
3) To schedule a recurring meeting, open the Zoom desktop app downloaded above, click the "Schedule" icon, and click the "Recurring" radio button. Here's the official documentation on Scheduling Recurring Meetings

If you want a recurring meeting at different times, Zoom says you can schedule recurring meetings "to be used at anytime". It's a recurring meeting without a time. Then you would have to notify your class as to the actual schedule.

Regarding your Zoom personal ID, Zoom says "Recurring meetings cannot be scheduled with your Personal Meeting ID (PMI) since your PMI is reserved so that you can start or schedule a meeting at anytime. For more info on scheduling meetings in general and all of the meeting settings, see their documentation on scheduling meetings."

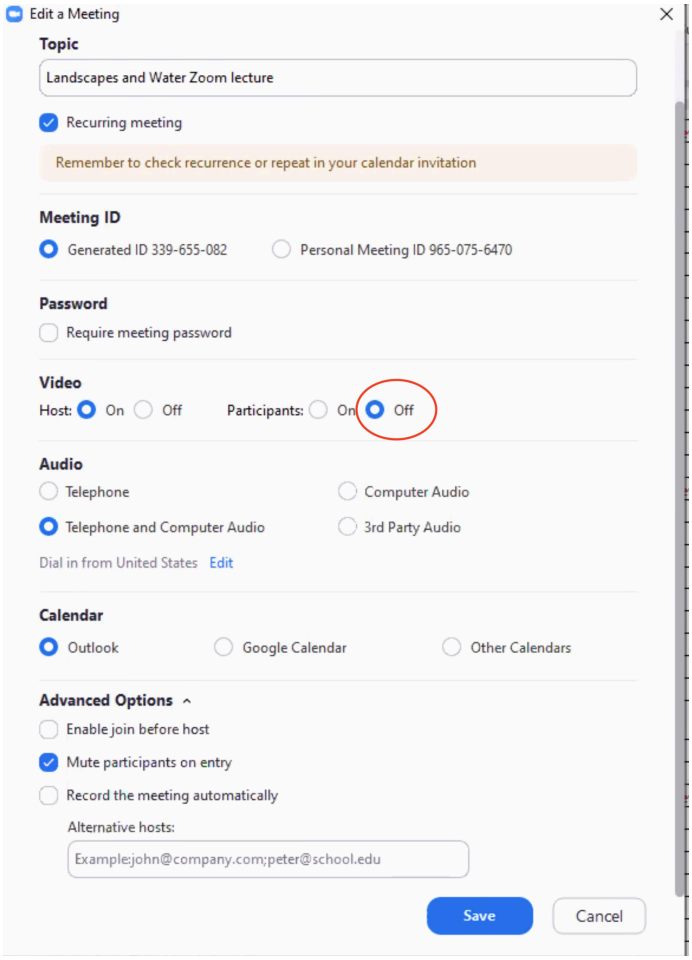
5) Muting participants:
- When you click on the "Participants" icon at the bottom of the Zoom window, a right sidebar opens. Click "More" at the bottom of that sidebar and you'll see a list of options. Uncheck "Allow participants to unmute themselves" if you want to prevent interruptions.
- Be sure to select the option "Mute participants on entry". I think you definitely want everyone muted. If students are in the same room together on multiple laptops, they'll get echoing/screeching feedback if they're unmuted.

- Also uncheck "Allow participants to rename themselves"
- Best to disable the video for the participants as well (see next section).
- Large classes may want questions asked via chat — it's helpful to have a 2nd person assist with the chat when there's a large group.
- Here's an example of the settings for an individual meeting:



6) Preventing participant video and emoji/silhouettes from overlaying your presentation:

- **Do not share your desktop.** When you share your desktop everyone sees everything on your desktop and your Zoom host controls.
- **Share the application** you want people to see (eg. PowerPoint).
- Turn off the participants' video feed in Settings when scheduling the meeting:



- Individually turn off participant video.

7) Network Performance:

- The best experience for presenting will be if you are hardwired connected to your home router or office Ethernet (not wifi). **Jeff bought Ethernet cables for you to take home if needed. See Darla or Jeff if you need one.**
- Encourage your students to do the same or, at least, be in a wifi location with good reception.
- If all you have is a laptop and that laptop only has wifi (no Ethernet port), **let Jeff know. He has several dongles with an external Ethernet card.** It's a small device that connects to your laptop via USB-C and will allow your laptop to connect an Ethernet cable, among other things.

And here's the Zoom Help Center link in case you need it.

Recording Lectures Offline:

There are several options:

1) To record a slide presentation with voice-over within PowerPoint, see Sarah's documentation, Recording a Video in PowerPoint

2) This tool helps capture lecture/slides and then post on Canvas. See Techsmith Relay Tutorial

3) Do a Zoom meeting with one participant (you) and record it. Share your desktop on Zoom and run through your PowerPoint presentation/lecture. Then upload your video file (.mp4) to Canvas or Google Drive (if you don't use Canvas).

4) Upload your PowerPoint presentation as a PDF to Canvas. Record the lecture audio on your smartphone and upload the audio to Canvas. The audio needs to include verbal instructions on when to turn the page.

5) If you are a Mac user, use QuickTime to record your screen and audio. Save the recorded video to your hard drive and upload it to Canvas or Google Drive

NOTE: An external microphone, a headset with a microphone, or headphones/earbuds with a microphone will deliver much better sound for your students. Whatever headphones or earbuds you use with your smartphone should work for this purpose too.

Working from Home:

1) The first thing is to make sure you have all the apps you need on your home computer. Many apps can be downloaded from Software & Hardware or from whatever vendor you use for specialized apps.

2) Consider putting all the files you'll need at home in the cloud:

- Google Drive - your *identikey*@colorado.edu account is also a Google account. There is unlimited space on Google Drive for you. Start copying your files now!
- Microsoft OneDrive - your *identikey*@colorado.edu account is also a OneDrive account. This also enables Office collaboration.
- Share documents via Google Drive

3) Consider using Microsoft 365. Since it's browser-based, you can access it from any PC, Mac, or Chromebook.

4) For small meetings with faculty or students, use Microsoft Teams (https://teams.microsoft.com/). It's free via University contract with Microsoft.

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5) Remote desktop capability. This enables you to work on your GUGG office computer from home. It's a bit complex to set up and you won't necessarily need this or want it if your home computer is set up well. It's not great for ongoing use or doing a complex task with graphics unless you have superior network speed at home, but if you forgot a file from GUGG and you want to move it to the Cloud, this can be a lifesaver:

- On your home computer, download the Cisco VPN app from the URL above and follow the instructions - This is needed to access the campus network so you can get to your office computer.

- Be sure to leave your machine powered on when you leave your office. If there's power to the device, you can't connect to it.
- Before
- For both Mac and PC users, write down the ip address of your office computer before you leave GUGG (If you skip this step, you can't connect to your PC.)
    - Mac:
        - Open System Preferences > Sharing. Check the box in the left pane, "Remote Management".
        - Note the information that says: "Other users can manage your computer using the address **guggxxxxx-xxx-dhcp.colorado.edu**. Write this down. You will need it at home.
        - Click the "Only these users:" radio button, click the '+' icon, and select your name. That means only you can access your computer remotely.
    - PC:
        - Open Settings (Right-click Windows Start and select 'Settings')
        - Open Settings > Network & Internet > Status (left sidebar)
        - Scroll down in the main window and click "View your network properties"
        - Scroll down through this information and look for the 'IPv4 address'.
            - Some computers have multiple sections and multiple IPv4 addresses for Ethernet connections.
            - If your computer is in GUGG, you're looking for an address labeled 'IPv4 address:' where the address starts with 128.138.181.??.
            - Write down the IPv4 address (minus the '/' and number that follows. For example, 128.138.181.31 is a valid GUGG network address. This IP address will be the computer name you will connect to from home.
- For PC users accessing a remote PC from a home PC: If you don't already have it, install Microsoft Remote Desktop:
    - On your office computer, Set up your PC to accept remote connections. (If you skip this step, you can't connect to your PC.)
    - If Remote Desktop is not already on your home computer:
        - For the next step, you need to know what type of operating system you have. Go to Settings > System > About (left pane). In the main pane of 'About', look at "System Type" to learn if you have a 32-bit or 64-bit OS.
        - On your home computer, choose the client that matches the version of Windows. Download the Remote Desktop client (MSRDC) which supports Windows 10, Windows 10 IoT Enterprise, and Windows 7 client devices:
            - Windows 64-bit
            - Windows 32-bit
            - Windows ARM64
        - Once you've installed the client at home, you can launch it from the Start menu by searching for Remote Desktop.
        - Use the IP address as the "name" of the computer you want to connect to.

- For people with a Mac at home and a PC in your office, get the Remote Desktop client
    - Download the Microsoft Remote Desktop client from the Mac App Store on your home computer.
    - On your office computer, Set up your PC to accept remote connections. (If you skip this step, you can't connect to your PC.)
    - At home, add a Remote Desktop connection or a remote resource. You use a connection to connect directly to a Windows PC and a remote resource to use a RemoteApp program, session-based desktop, or a virtual desktop published on-premises using RemoteApp and Desktop Connections. This feature is typically available in corporate environments.
- For people with Macs at home and at work.
    - I'm still working on this. The office Apple app has 1-star reviews and it costs $79.99. I want to avoid that option.
    - I do this via a Chrome app for free. But I want to confirm this method is the best option before giving you instructions.

KESDA:

- ENVI/IDL: Students are temporarily authorized to download and install ENVI/IDL for free. Have them download the software from Site Licenses - IDL and run the installer. During the install process, specify to use a license server.
    - Students with Macs will also need to download and install XQuartz (noted on the webpage). The license server address is ucb-license01.colorado.edu
    - Students will also need to download and install the Cisco VPN utility (VPN (Virtual Private Network)) and launch it before they launch ENVI off campus so the license server can be accessed.
- Mac users needing ArcGIS: They will need Windows installed, either virtually (via Parallels or VMWare) or by partitioning (via BootCamp). Harvard has a good page on this: Installing ArcGIS Desktop on Mac. Students would need to purchase Windows unfortunately.
- Remote desktop access can't be used due to poor scalability and awful performance.
- OIT is working on a virtual machine solution where students would use a browser or a VM client app to access a centrally located virtual machine with all the necessary apps. They have not provided guidance on when this will be available.

Canvas:

- Once I publish a timed quiz, how can I give my students extra time? See the Canvas article.

Use Jeff as a Support Resource

Call Jeff at 303-248-6025 or email him at jeff.nicholson@colorado.edu if you need assistance!!