

Video Production with OBS or Zoom
V. 3/20/2023-ARCHIVED

Preference reference Slite:

<https://docs.neuromatch.io/p/clm22sHdnPE23V/How-to-Record-a-Video>

[Purpose](#)

[Scope](#)

[Related Documents and Processes](#)

[This Document is a Subprocess Of](#)

[This Document is Close To](#)

[This Document Depends On](#)

[Roles and Accountabilities](#)

[Access Needs & Technology Platforms Used](#)

[Overview](#)

[For using Zoom:](#)

[For using OBS:](#)

[Checklist](#)

[Detailed instructions](#)

[Install OBS, open it, and go through the install wizard](#)

[Tweak video settings](#)

[Select the right microphone](#)

[Add a screen capture](#)

[Add a webcam](#)

[Place the items](#)

[Do a one minute test](#)

[Do the real thing and save for production team](#)

Purpose

Create high quality videos using OBS (or Zoom).

Scope

Technical aspects of recording a video. Does not include creating the content talked about in the video or determined length of video.

Related Documents and Processes

This Document is a Subprocess Of

- Content creation
- Production

This Document is Close To

- Content Creation
- Video Production
- Copyright Rules

This Document Depends On

- Content Creation
- Curriculum Development
- Slide Creation

Roles and Accountabilities

Activity	Process Owner	Responsible Role
Recording tutorial	Day Lead	Day Lead or other person assigned by Day Lead

Access Needs & Technology Platforms Used

- [Free version of Zoom](#)
- Or [Open Broadcast Software \(OBS\)](#)

Overview

The original version of this document for NMA 2020 was created by Patrick Mineault and Arash Ash. It has been modified by Tara van Viegen for NMA CN and DL for 2021.

For all Neuromatch videos, please use OBS.

Detailed instructions

For using OBS:

We are producing videos with OBS, powerful free software available for Windows, Mac and Linux. OBS produces high quality videos that can overlap multiple sources together. You will create a scene as follows, which is the standard format for NMA:

- Full screen slides + your webcam feed in the top right corner

This guide contains a checklist and a more detailed instructions page below.

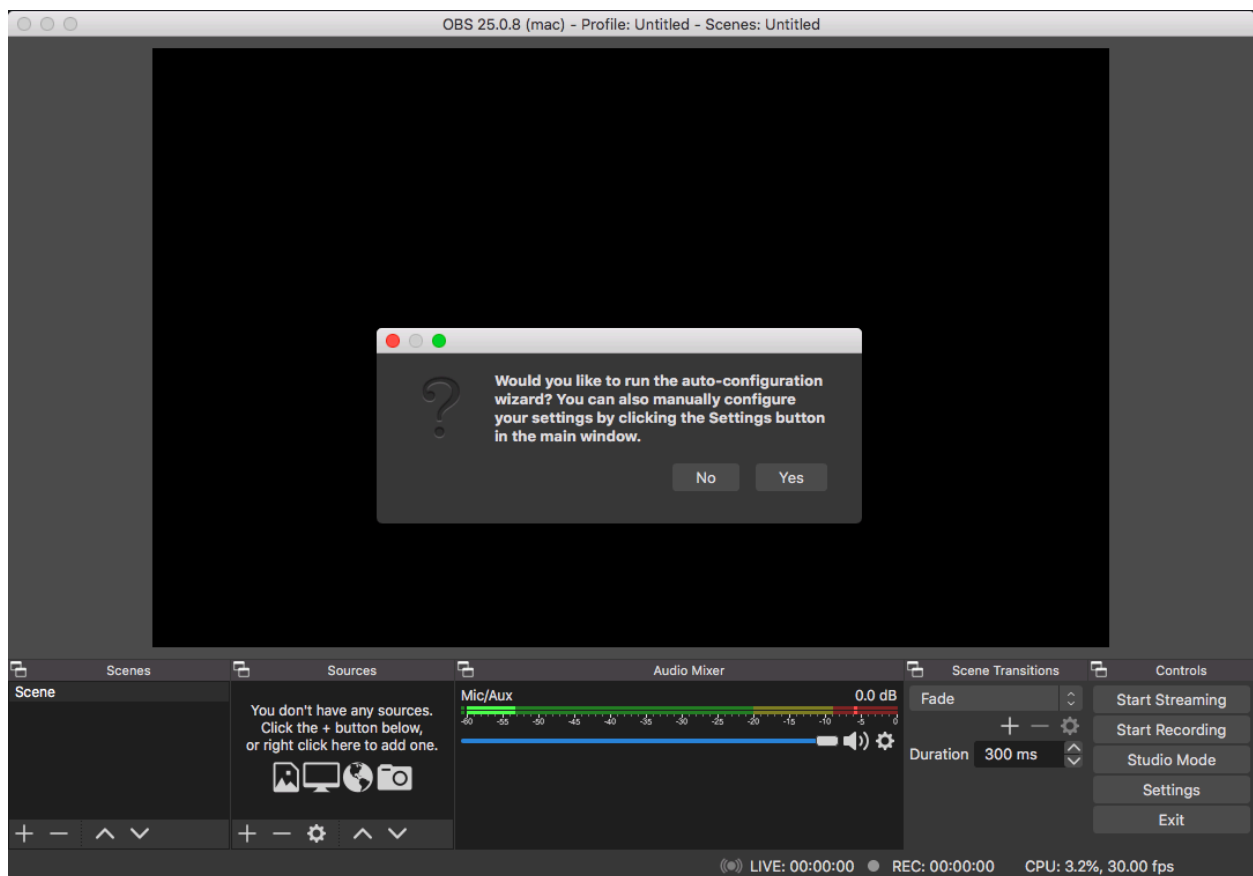
Checklist

- ☐ [Install OBS](#), use the setup wizard to set up everything for recording at
- ☐ Optimize for just recording when prompted
- ☐ Tweak the video settings 1920x1080, 30 fps
- ☐ Select the right microphone
 - ☐ Controls > Settings
 - ☐ Speak in a normal voice and check that your voice is not clipping (your voice should never reach higher than -3dB!)
- ☐ Create a scene with full screen slides + your face on the top right corner



- ☐ In the Source box: Click the + and then Display Capture to capture the whole screen
- ☐ Create a new Video Capture to capture the webcam
- ☐ Reshape these captures for a tight fit (use the helper script!)
- ☐ Test with a one minute recording
 - ☐ Load video in VLC
 - ☐ PC: C:/users/\$user/Videos
 - ☐ Mac: /home/\$user/Movies
 - ☐ Check that the video that there's no black bars in the recording at the top or left and right
 - ☐ Check that the microphone is not clipping
- ☐ Do the real thing
- ☐ Upload your videos and short descriptions (the Production Team takes it from here!)

[Install OBS](#), open it, and go through the install wizard



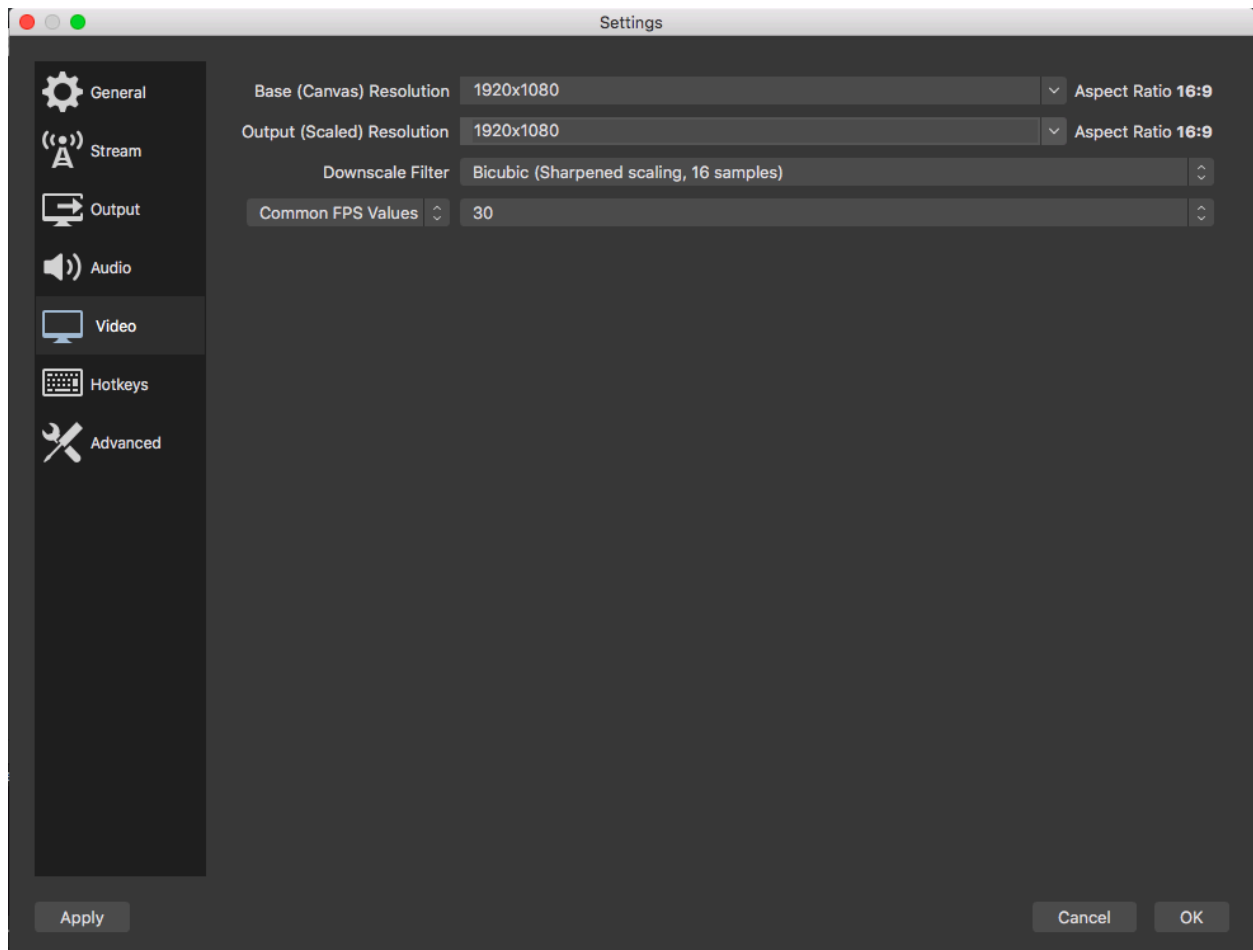
- Choose yes to go through the wizard



- Select **Optimize for Recording**
- **Very important: Make your base canvas 1920 x 1080, choose 30 fps**
- Let the wizard choose base settings for you

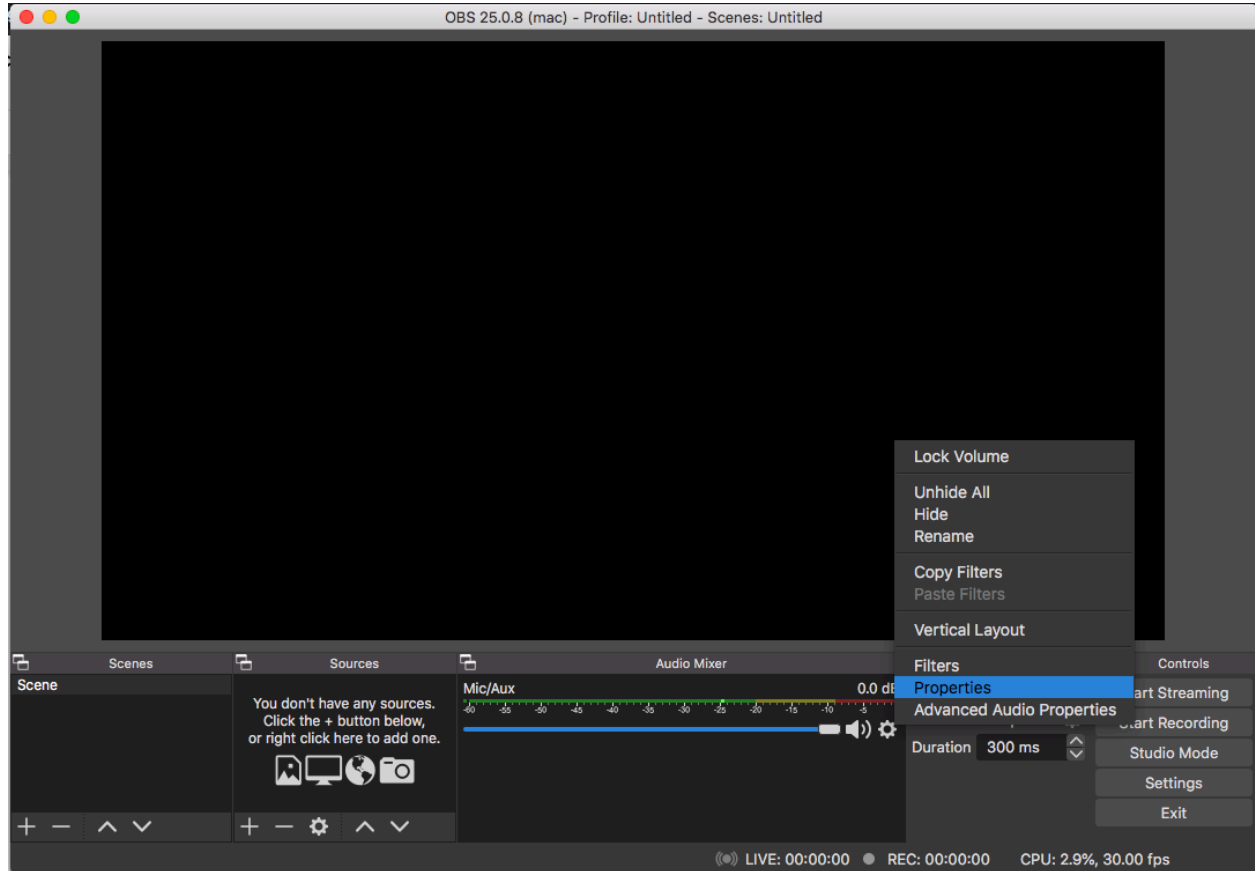
Tweak video settings

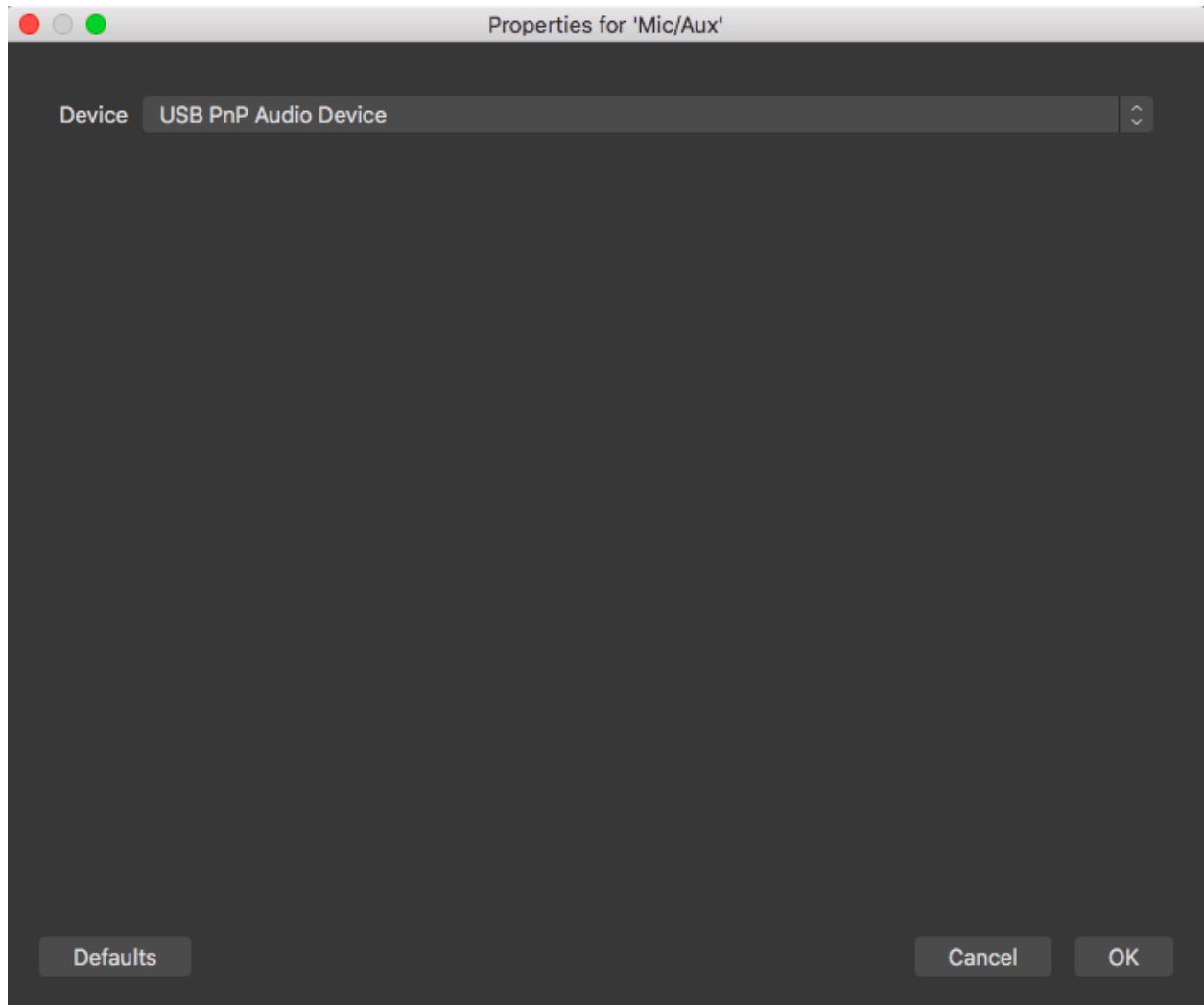
Go into Settings (bottom right of screen). Under Video, make sure that both base and scaled resolution are set to **1920 x 1080**.



Select the right microphone

Hit the gear icon next to the Mic/Aux input, and select your microphone



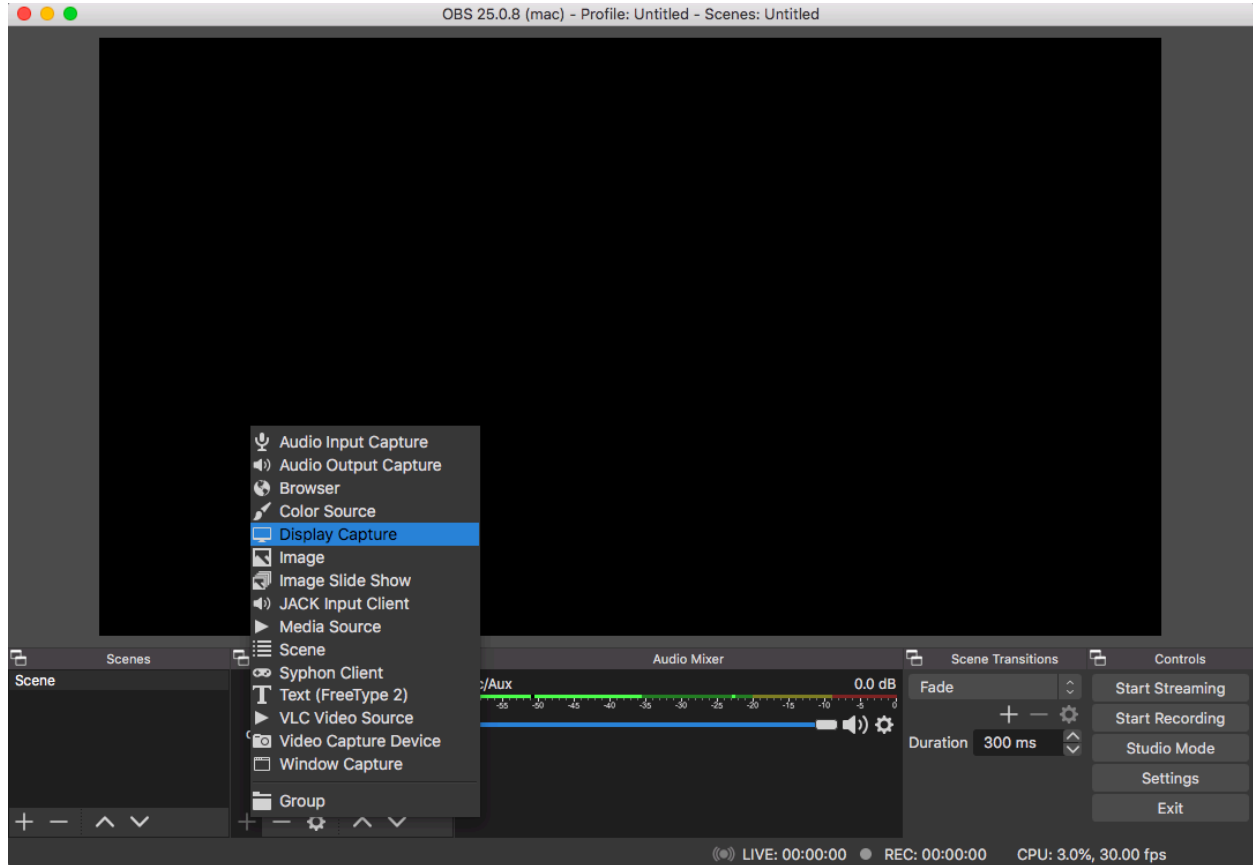


Speak in your normal voice from your normal position. Say a sentence with a lot of plosives, e.g. “Peter Piper picked a peck of pickled peppers”. If the audio gauge goes all the way to the right, your gain is too strong, which will result in distortion. **Decrease the gain of your microphone** in that case.

Our recommended microphone (Fifine gooseneck) has a **physical gain button** that looks like a volume knob, and if the microphone is close to your face it needs to be at about one quarter or less of full volume. If you have a physical gain button, use that first. You can also decrease gain in OBS using the blue bar below Mic/Aux.

Add a screen capture

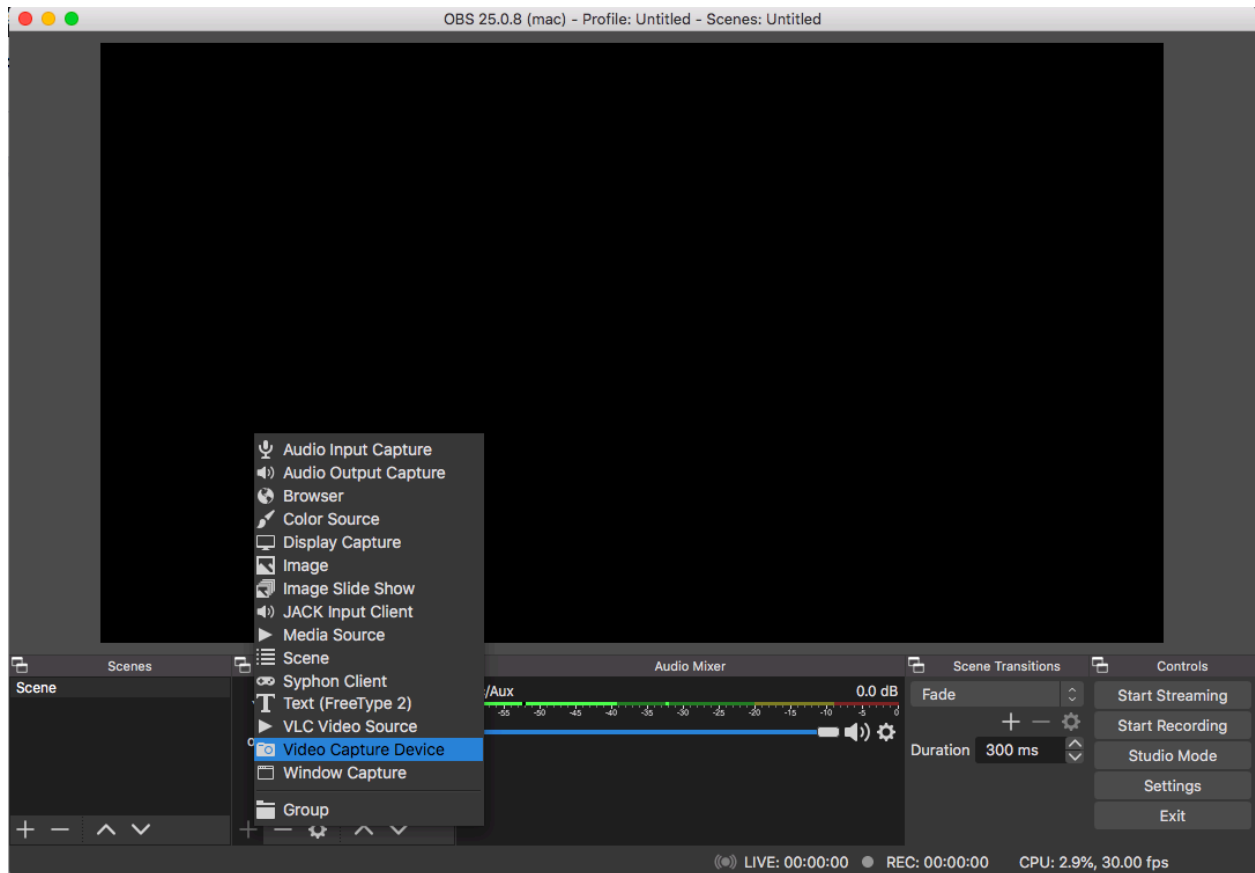
Use + to add a Display Capture to your scene. Name your capture “Full Screen desktop”



Your desktop should appear. If this does not work you can delete the full screen capture and use “Window Capture” instead. This allows you to capture a single window instead of the entire desktop (both options are fine).

Add a webcam

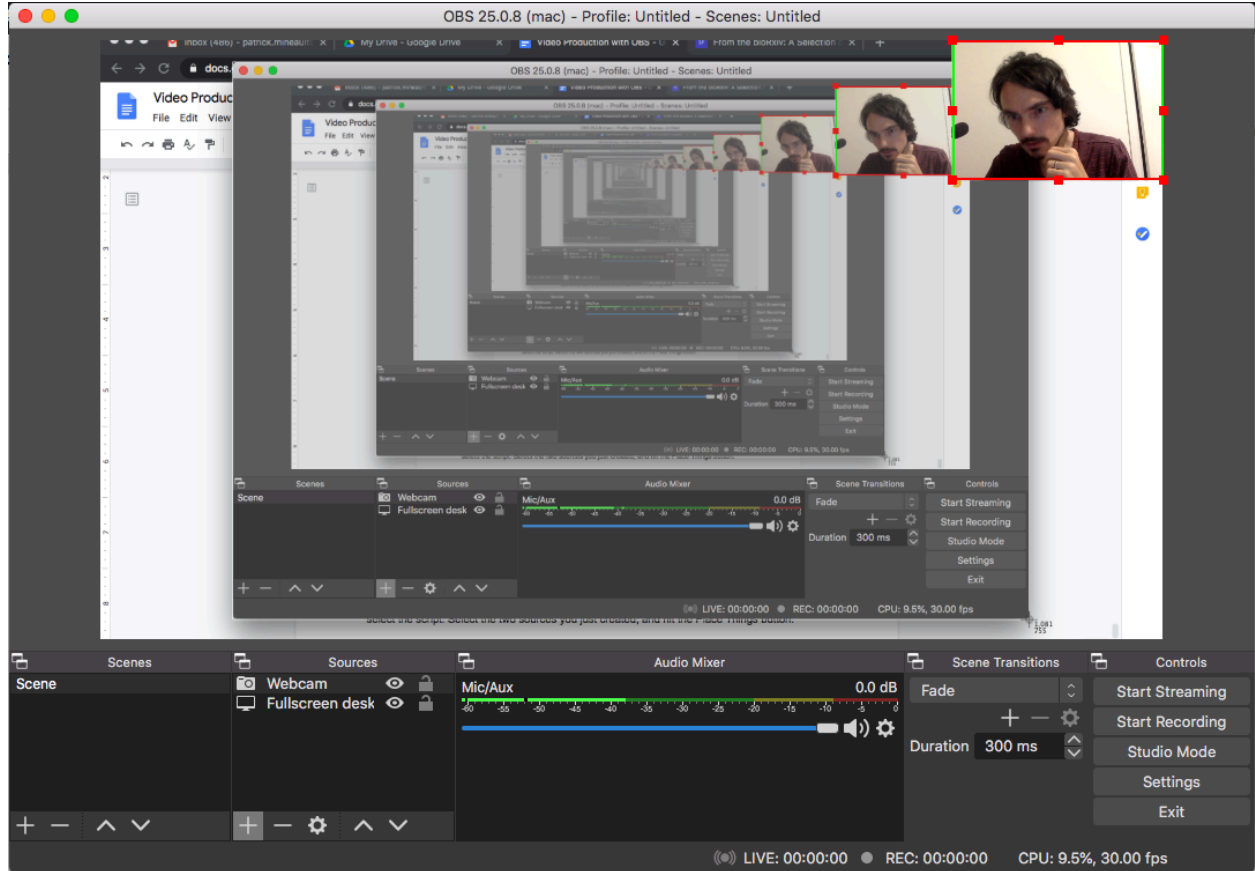
Use + to add a Video Capture Device (i.e. your webcam) to your scene. Name it “webcam” to make it easier to find later. Default settings should be fine.



Place the items

The screen capture should fill the whole screen (with no black bars). The webcam should go into the top right. Drag the red knobs to rescale; press the Option button and drag the red knobs to crop.

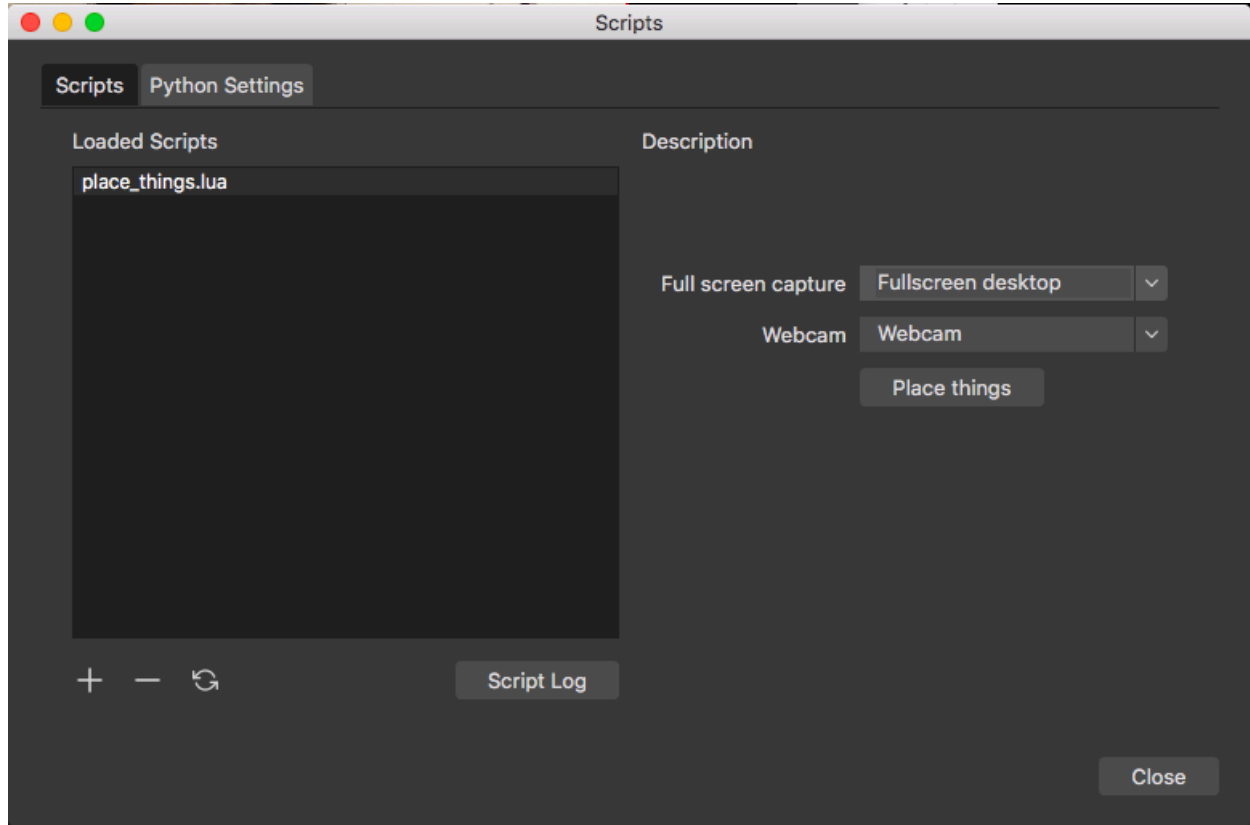
This is what it should look like:



It is very difficult to adjust on a Mac laptop without a second monitor because:

- 1) The aspect ratio of your screen is 16:10, and the presentation is 16:9. So you have to crop the fullscreen desktop window at the top and bottom which requires precision
- 2) You can't have the OBS window over a fullscreen Powerpoint or Keynote window, so you can't see what you're doing. It

We have a script to help you. [Download this script](#), go into the Tools Menu > Scripts, hit +, select the script. Select the two sources you just created, and hit the Place Things button.



Do a one minute test

Hit record. Go into Keynote, powerpoint, or google slides, go fullscreen, give a sample 30 second presentation, hit Alt+Tab or Cmd+Tab to go back and press stop.

- Look at the footage in your media player (e.g., vlc).VLC. The movie should be saved in /home/\$user/Movies.
- Make sure that the video has no black bars in the recording at the top or left and right. This could also be a good time to make sure that your webcam image fits neatly in the gray rectangle at the top right of the slides.
- Check that the microphone is not clipping.
- All set? You are good to go. In any case of any problems, try again and ask for help in Slack.

If you run into trouble, find the Video Production channel in Slack and ask any questions you have. You can also reach out to the Curriculum Lead or the Day Lead (if that's not you).

Do the real thing and save for production team

Review your final video to ensure it's up to your standards.



Once you have recorded your final videos, the production team will edit the audio and video for you. To this end, the videos need to be stored in our shared Google Drive:

- Please name the video according to this scheme:
 - "WXDX Name of Day Intro/Outro/Tutorial X"
 - Examples: W1D3 Model Fitting Intro 2, W2D2 Linear Systems Tutorial 6, etc.
- Place the video in the correct subfolder
 - If you don't have the folder link, reach out to the Curriculum Lead.
 - If you are working on materials that are not for a specific day (pre-course materials, other videos), contact the Curriculum Lead for the best place to save these.
- Tutorial Description
 - Each video is to be accompanied by a short description.
 - Please upload a google docs with a short description of each uploaded video (i.e. if you upload 1 intro, 1 description suffices but if you upload several tutorials, please make sure that each video is accompanied by a short description). The title of the video should match the description. The description should be 2-3 sentences long about the materials you cover in the video.
- Add the description to the uploaded video in the correct folder

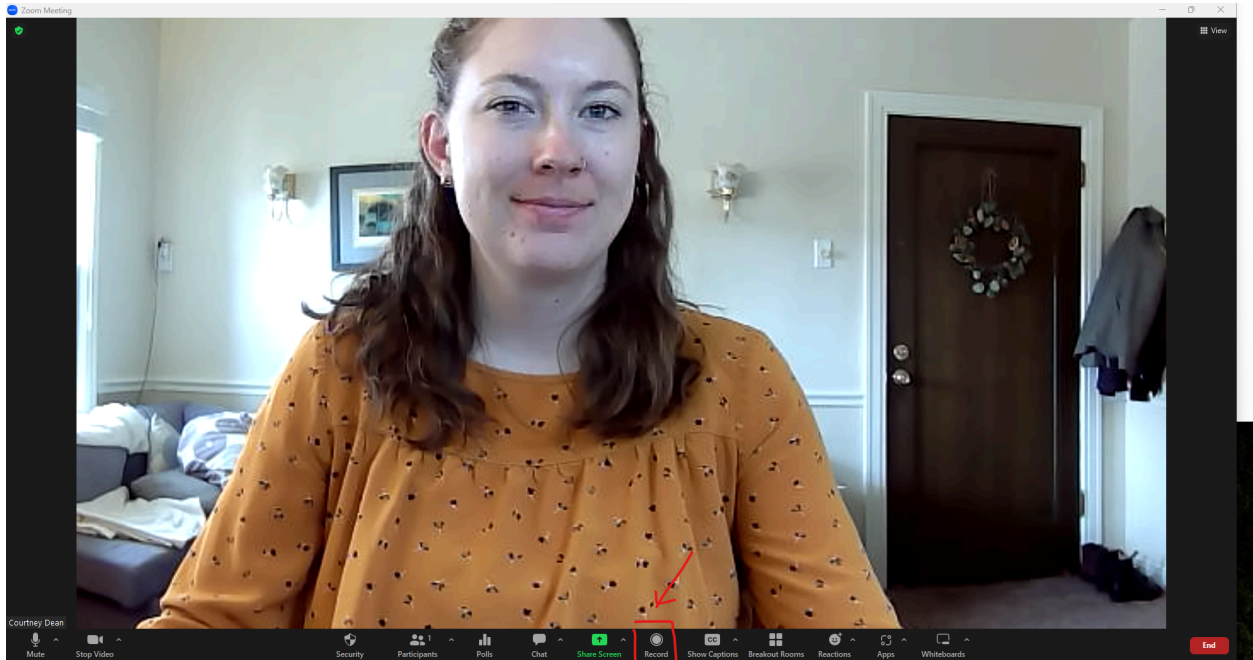
For using Zoom: (again use OBS if possible!)

Install the free version of Zoom (or whatever paid version you have access to).

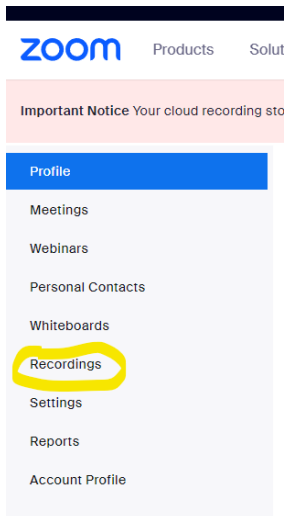
- Check for updates. Go to your Zoom desktop app, click your image in the top right, click Check for Updates.

Optimize for 3rd Party Editing - [full instructions here.](#)

- Start a new meeting with just yourself.
- Make sure your video and audio are working.
 - Make sure you are using your best quality microphone. Do a couple short test recordings and listen to yourself back to make sure it sounds clear.
- Make sure your slides are ready and you've practiced what you're going to say
- Select the "Record" button at the bottom of the screen. Sometimes you will also have to select the three dots that say "More" to find the "Record" button



- Share your screen with the green “Share Screen” button.
- Record yourself going through your slides.
- Once you stop the recording, it will either save to the cloud or locally on your computer.
 - To access your cloud recordings, go to zoom.us, log into your account, and go to recordings on the left side of the home screen.
 - If the video is saved locally, you’ll be able to find it through your file finder.



- Feel free to trim your video at the start and finish.
- Upload your video to the appropriate location on Google Drive or send it to your contact on the Curriculum Team.



•