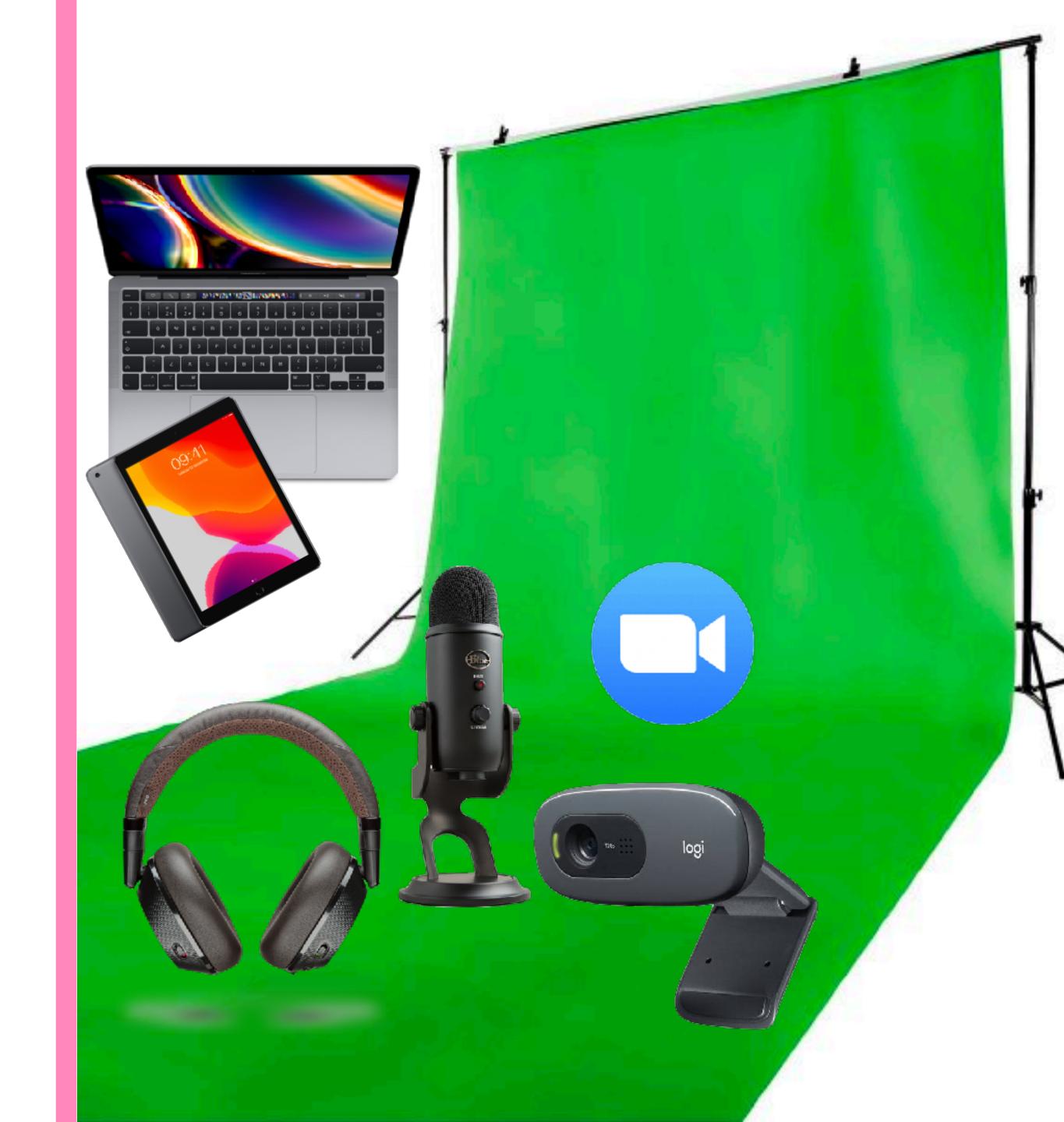


Preparing to Teach eCOTS 2020

### "CHANCES ARE YOU'RE TEACHING REMOTELY IN THE FALL"

**EVERY DEPARTMENT CHAIR / UNIVERSITY ADMINISTRATOR** 







## PEDAGOGY SHOULD DRIVE TECHNOLOGY

### TECHNOLOGY SHOULD DRIVE PEDAGOGY

### TECHNOLOGY / PEDAGOGY

- Consistency within a course is crucial
  - Stick vs. pivot
  - Get early feedback!
- Consistency across courses is important
  - You have access vs. students have access
  - Advocate for your choices but don't make them your students' problem
- Less is more
  - Be judicious with the number of tools
  - You love and use regularly ≠ best choice for course
  - Free to use ≠ free to learn

### CAN'T BUILD WITHOUT EVERYONE

CAN'T HAVE SYNCHRONICITY WHILE BEING AIR AND EQUITABLE

### COMMUNITY SYNCHRONICITY

- Consider the added value of being synchronous
  - Attending a synchronous lecture: Seeing others' faces + hearing others' questions +?
  - Working on a problem as a small group: Seeing others' faces + hearing others' questions + thinking together + learning from each other +?
- Weigh the added value against the challenges of synchronous engagement
  - Geography
  - Internet access
  - Computer setup
  - Living circumstances

# ASYNCHRONOUS TEACHING MEANS MAKING LOTS OF VIDEOS

# THERE IS ALREADY A VIDEO ON EVERY CONCEPT I MIGHT WANT TO TEACH

### ASYNCHRONY MATERIALS

- It's ok to not be an expert video maker
  - Build on what you know (animated graphics in R / animations in Keynote, PowerPoint, etc.)
  - Think beyond the camera in your laptop [video]
  - Supplement existing videos, instead of recreating them
  - Make a plan and learn from others
- Video is only one of the many options for asynchronous engagement
  - Interactive applets, e.g. [Rossman/Chance Applet Collection], [ShinyEd]
  - Interactive tutorials, e.g. [Primers built with learnr]
- You can build an asynchronous community
  - Peer review, e.g. [on GitHub]
  - Reading with collaborative note taking, e.g. Google Docs, [Perusall]
  - Opt-in virtual communication, e.g. [virtual donut]

## CHALLENGES FOR NEW TANGET STATEMENT OF THE SECOND S

#### CHALLENGES

- You might not have the previous experience to know pain points for students
  - and it might be harder to get that feedback from them online
  - Take advantage of your senior colleagues' experience
  - Reach out to other networks, e.g. ASA Communities: [SSDS] [Online Teaching], [Isostat], [RStudio Community], PTT Slack!
- You might be more experienced in this than the senior faculty in your department
  - or, at least, more adventurous!
  - Reach beyond your department, especially to colleagues teaching similar material
  - Take advantage of your university's [INSERT ONLINE LEARNING GROUP NAME HERE]
- You might "miss out" on one of the most rewarding aspects of being faculty personal interactions with students
  - Make yourself available, e.g. daily brief office hours? virtual coffee?
    - Tip: Use an appointment scheduling service, e.g. [Calendly] or what your LMS offers
  - And remember, this won't be forever! (I hope!)

## AN INCOMPLETE LIST OF RESOURCES

#### LONG FORM

- Tips for teaching tech online, deeply informed by the Carpentries (Elizabeth Wickes)
   [Blog post]
- Teaching R online with RStudio Cloud (Mine Çetinkaya-Rundel) [Webinar] [Blog post]
- Teaching online on short notice (Greg Wilson) [Webinar] [Blog post]
- Mapping and planning a live coding workshop (The Carpentries) [Blog post]
- Jumping into digital: Lessons learned while moving live-coding workshops online [Webinar]
- Sharing on Short Notice: How to Get Your Materials Online With R Markdown (Alison Hill and Desiree De Lyon) [Webinar] [Blog post]
- A pattern language for screencasting (Chen and Rabb, 2009) [DOI]

### TIPS



Many have shared incredible remote teaching resources here at the beginning of the lockdown. Now that you had a chance to put those into use, what did you find to be the most useful resources / tips for teaching stats and data science (or anything!) remotely?



AmeliaMN @AmeliaMN - 1m

Replying to @minebocek

iPad + apple pencil + Zoom share iPad via airplay = I can actually communicate online

I use this combo SO MUCH. While recording videos, live synchronous class sessions, and especially office hours. I need to be able to circle things, write math, draw pictures. All possible!



**KBM** @\_khameelbm · 1h Replying to @minebocek

A combination of Wacom + Laptop + MS Teams has worked really well for me.

Wacom eases the eqn writing, drawing and annotating in live lectures of the math-heavy modules that I teach. I often start from a clean slate, & then gradually fill up the space as lect proceeds.



Marney Pratt @marney\_pratt · 38m

Replying to @minebocek and @AmeliaMN

Similar to @AmeliaMN but Windows version. I use a Surface Pro hooked up to an external monitor. I can write on the Surface but have the Zoom window with people's faces on the external monitor. Exploring MS Whiteboard or Mural for shared brainstorming for the fall