



# DEMO: Best Practices for MOOC Video

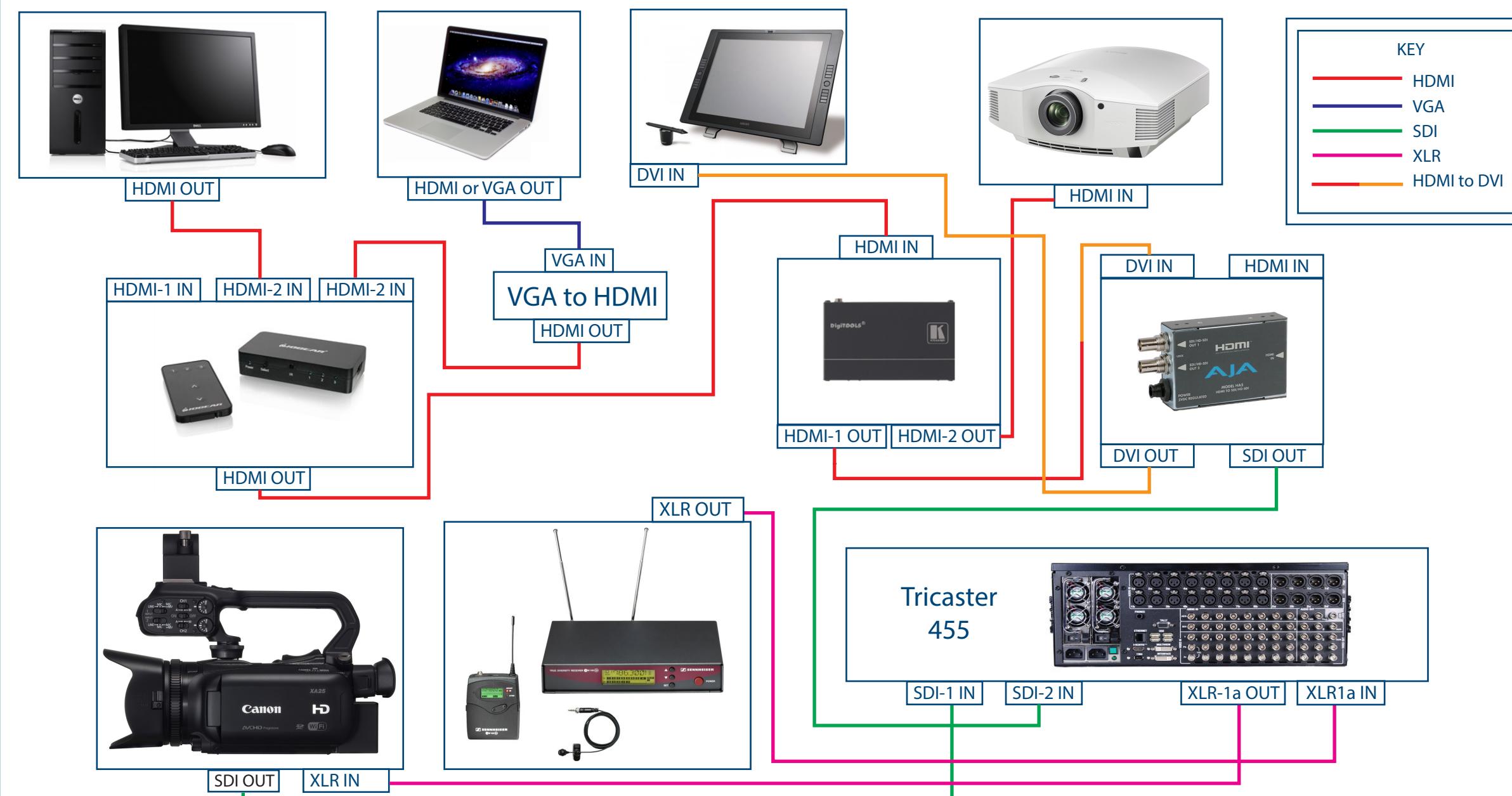
Michael Ball, Aatash Parikh, Eric Arvai and Dan Garcia  
 Electrical Engineering & Computer Sciences  
 University of California, Berkeley



## Option 1: Live Lecture

- + Time saver for lecturer (they don't have to record twice)
- + Ability to capture energy of lecture
- + Lecturer receives feedback from live students
- + Doesn't require additional recording location (like a studio)
- Online students aren't being directly engaged by lecturer
- Generally requires lecture hall to be well lit, and be adequately equipped for live lecture recording
- Puts additional pressure on lecturer not to make any "mistakes"
- Student questions, which generally enhance the live lecture experience, require additional strain on production crew to record, subtitle video, or requires the lecturer to re-state the question for the recording

UC Berkeley 540 CORY HALL - A/V Signal Flow Diagram



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**Hardware:** NewTek Tricaster, Canon C300 (x2), SDI cables, XLR cables, Countryman Lav Mic, Zoom H4N, Ikan Teleprompter

**Software:** Adobe Premiere, Adobe Media Encoder, Final Cut Pro, Avid Media Composer

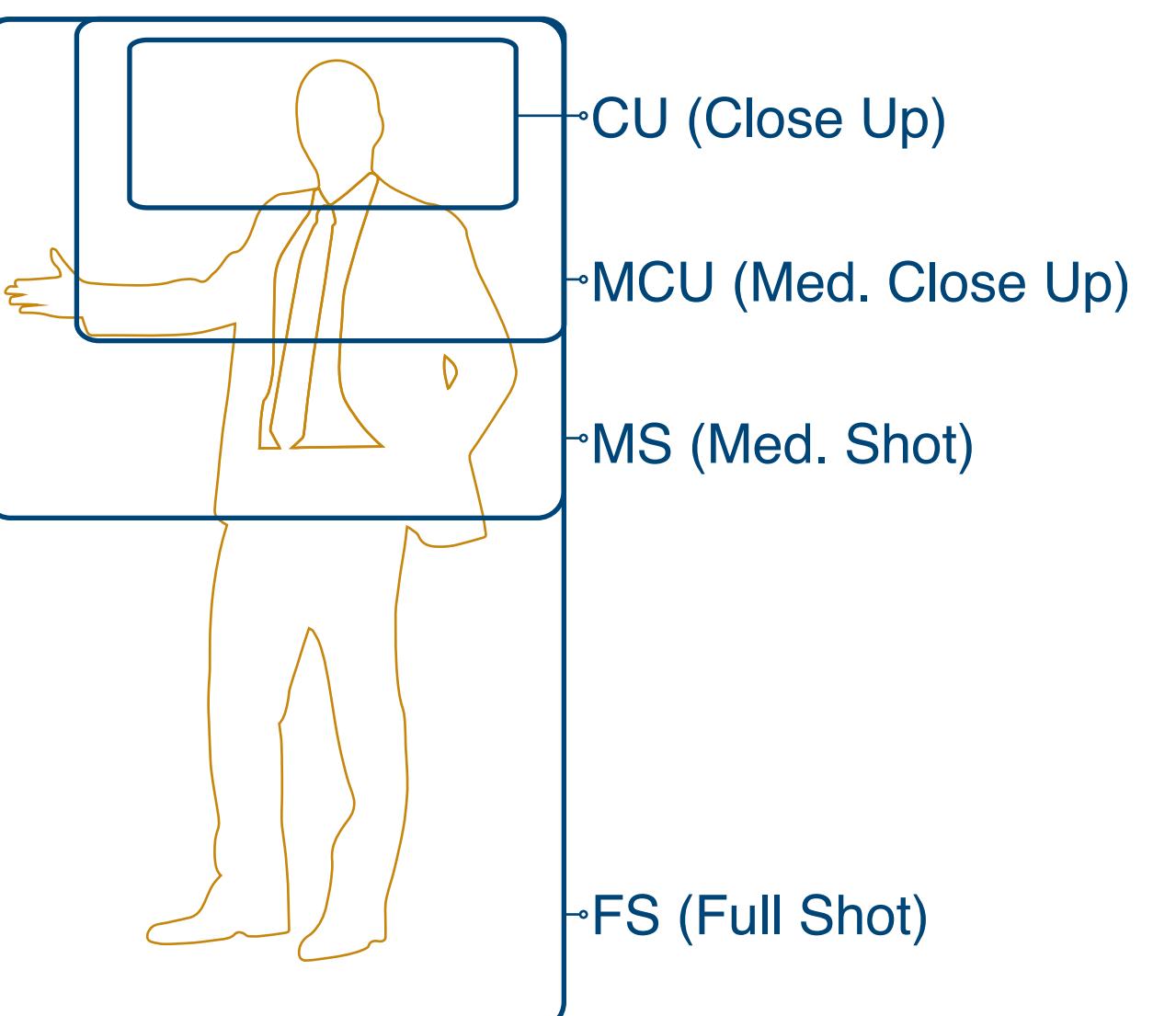
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**Hardware:** Laptop, HD Video Camera or Built in Cam, HDMI Cables, XLR cables, Sennheiser Lav Mic

**Software:** Camtasia, Quicktime Screen Capture

## Video / Audio Best Practices

### CAMERA BASICS



### Composition

- MS to CU is preferred depending on setup

### Focus

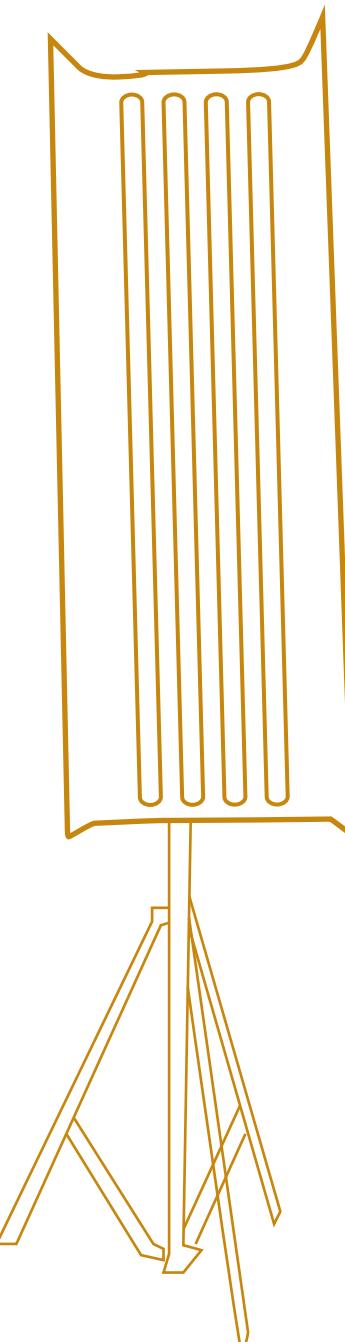
- Simple Focus Technique:  
Zoom in to Subject, Focus, Zoom out

### Exposure

- Controlled by aperture or iris, measured in f-stop's (f1.4 - f11)
- Zebra stripes set to 70% indicate highlights (or 70% white pixels)
- They should cover ~10-30% of the frame

### LIGHTING: "Quality vs. Quantity"

- Quality of shadow edges is either hard or soft
- Soft edges are generally preferred for non-dramatic material
- Diffuse or bounce light to soften shadow edges using a bounce card, flexfill, diffusion gel, or silk
- Quantity of light can be changed by changing the distance of the light to the subject or changing the output (or Luma) of the light
- Adjusting exposure can also affect the amount of light hitting the sensor



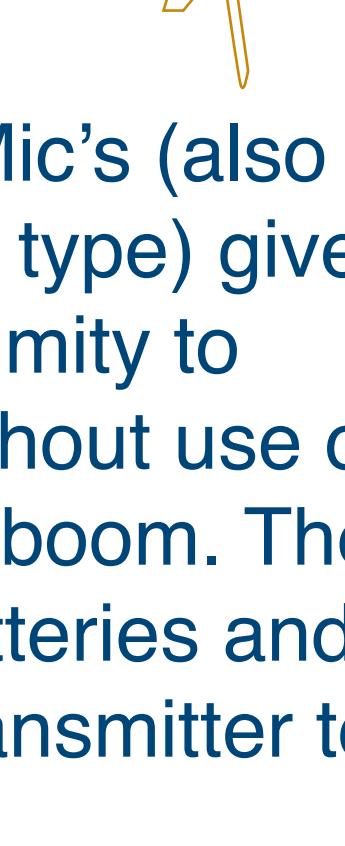
### SOUND: "Microphones"

Shotgun Mic's are directional, can be placed further from subject, and are commonly found on a movie set. Shotgun is a condenser type which requires phantom power (+48v). A boom or stand is highly recommended.



Dynamic Mic's are durable, generally cheaper, require no additional power, can handle high sound pressure levels, are commonly found on a music stage. These mic's generate low voltages relative to other mic's and generally require a pre-amplifier to boost the signal prior to reaching the recording destination. A mic stand is highly recommended.

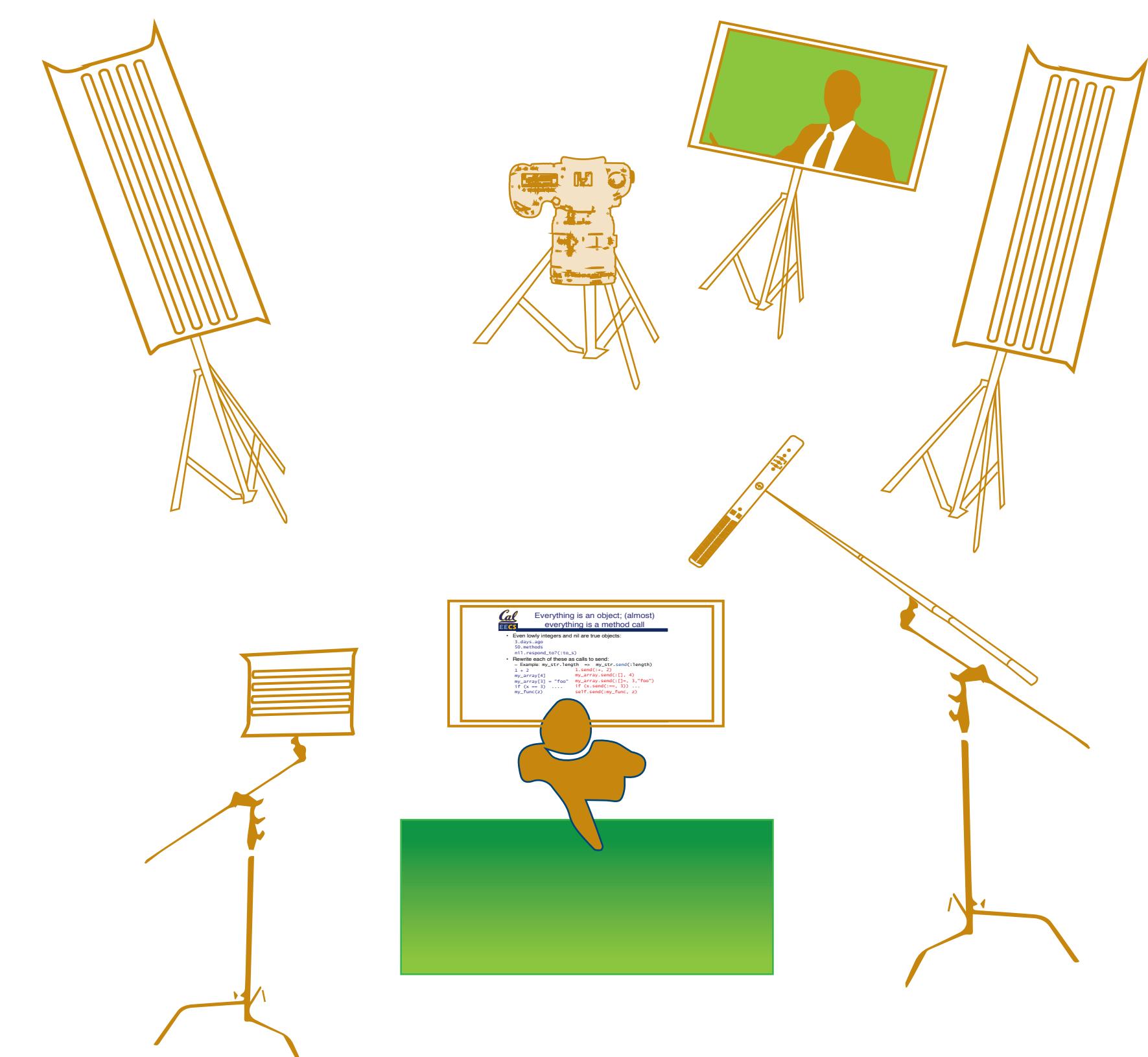
XLR cables are commonly used to connect Mic's to Recording destinations: camera input, portable recorder, or directly to computer (requires conversion)



Wireless Mic's (also condenser type) give close proximity to subject without use of a stand or boom. They require batteries and syncing transmitter to receiver.

## Option 2: In Studio

- + Online Students are being directly engaged
- + More controllable production environment  
Ability to isolate unwanted sound / noise  
Ability to light appropriately  
Ability to compose an unobstructed shot
- + Relieves pressure of live performance because any mistakes can be edited in post production
- Requires lecturer to invest additional time performing the material twice
- Requires the lecturer to "act" as the camera doesn't emote like a room full of engaged students



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**Hardware:** Computer, Green Screen (Cloth/Paper), Canon 5D Mark iii, SDI / XLR cables, Schoeps CMIT 5U Mic, Ikan Teleprompter

**Software:** Adobe Premiere, Adobe Media Encoder, Final Cut Pro, Camtasia

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**Hardware:** Laptop, HD Video Camera or Built in Cam, HDMI Cables, XLR cables, Sennheiser Lav Mic, iPad Teleprompter

**Software:** Camtasia, Quicktime Screen Capture