

Utilizing Video: Resources, Tools and Tips

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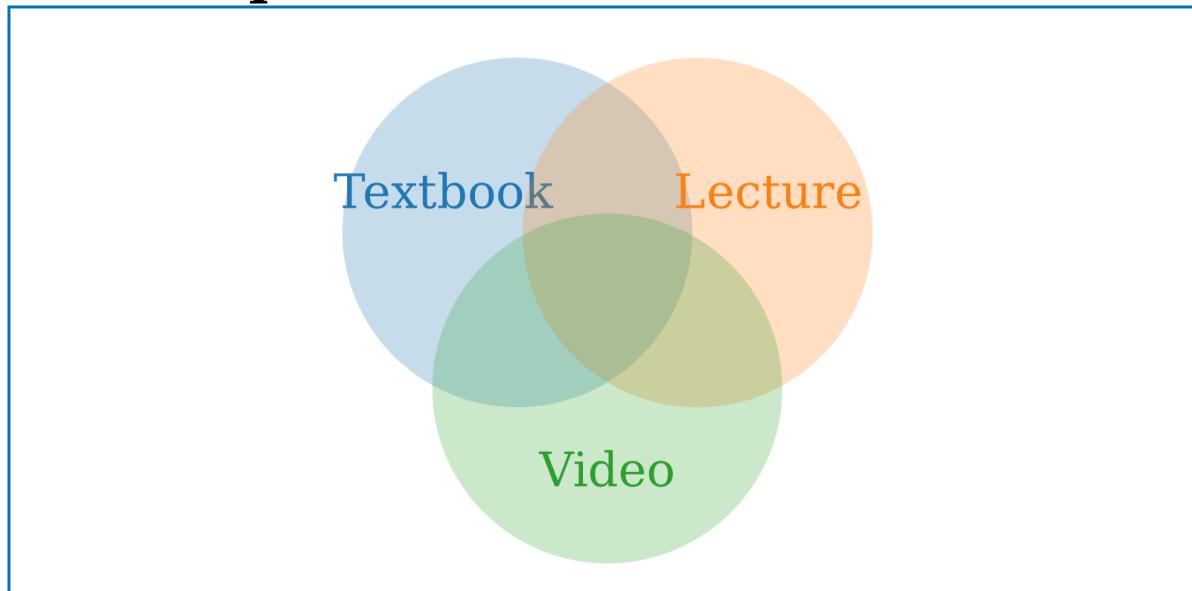
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My Bona Fides

- Associate Professor of Practice in CSE, 8 years
- Using videos for ~5 years
- YouTube:
<https://www.youtube.com/c/ChrisBourkeUNL>
 - 250+ videos
 - 400+ subscribers
 - Top Video: 21k views

Video: Why

- Teaching Philosophy: Cast a wide net
 - *Not* a replacement for lecture
 - *Not* a replacement for books, etc.



Video: Why

- Visual vs Aural vs Kinesthetic Learners
 - Debunked
(<https://www.theatlantic.com/science/archive/2015/02/the-myth-of-learning-styles/557687/>)
 - *BUT*: still good to provide options
 - Learning is like exercise
 - The most effective teaching tool is the one students actually use

Video: Two Types

- Prepared Videos
 - Students watch before/after lecture
 - High production values
 - Tighter production
 - Highly polished
 - Edited to "perfection"
- Lecture Videos
 - Live recording of lectures
 - Less polished
 - Less work

The Good

- Perfect for online sections
- Students get a "second chance"
- Watch/rewatch at your own pace; ESL students, etc.
- Does not result in lower lecture attendance
- Overall better experience
- More learning opportunities
- Greater impact beyond your class

The Bad

- Potentially huge investment in time (but good ROI)
- Videos still have a shelf life
- Captioning Sucks (<https://amara.org/>)

The Ugly

- Need *good* equipment:
 - Webcam
 - Good Mic setup
 - Software
- Need *quiet* space
- Preproduction: scripts/practice, multiple takes, etc.
- Always test!

Tools

1. Camtasia
2. Vidgrid
3. YouTube
4. One Button Studio/Light Board
5. OBS (Open Broadcast Software, the *real* OBS)
6. Zoom

Camtasia

- Primary use: high-quality video production
- Multi-source video capture
- Non-linear video editing
- Visual & Audio effects
- Alternatives: Filmora, Captivate, Screen Flow, etc.

Example

4.6 - Loops - Exercises



<https://www.youtube.com/watch?v=eslA7mvgdXY>

Example

1.4 - Quick Intro to Java - Arrays & Collections



<https://www.youtube.com/watch?v=VB-RPyjR3bI>

Vidgrid

Vidgrid

- Limited editing capability
- <https://app.vidgrid.com/>
- <https://its.unl.edu/services/unl-academic-video/>
- ARCH 127, Avery 109, 115, Hamilton 110, Henzlik 124, JORG 110, Love 102, TEAC 105, Richards 15

Example

Lecture: Dynamic Programming (2019/08/06)



<https://www.youtube.com/watch?v=F57UiFBp1kc>

Example

5.1 - Functions (2018/09/17)



<https://www.youtube.com/watch?v=JvFUBFAXW2o>

YouTube

- Best hosting/delivery system
- Nearly always available, ubiquitous
- Huge potential audience
- Curated video solution
- Free, ad-free (no monetization)
- <https://www.youtube.com/c/ChrisBourkeUNL>

One Button Studio

- DIY Video Recording with a single button
- <https://its.unl.edu/services/one-button-studio/>
- <https://youtu.be/w1Nky1b7TCg>

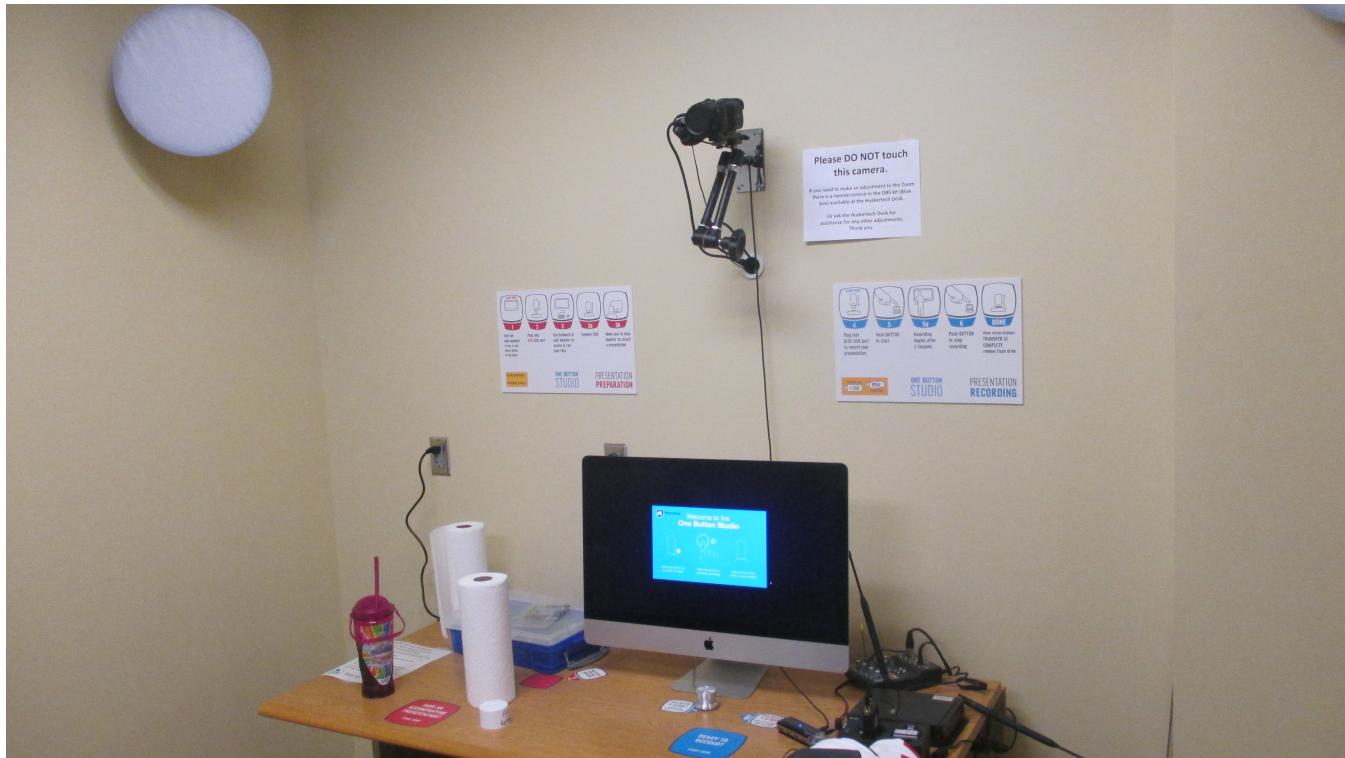
One Button Studio - Henzlik 123F



One Button Studio - Henzlik 123F



One Button Studio - Henzlik 123F



One Button Studio - Henzlik 123F



One Button Studio - Love 116



One Button Studio - Love 116



One Button Studio - Love 116



One Button Studio - Love 116



Example

Lecture 5.x - Quick Sort (Light Board Test, 2019/04/03)



<https://www.youtube.com/watch?v=Sc9UGM7BVDY>

Example

Dynamic Programming: Optimal Binary Search Trees Part 4



<https://www.youtube.com/watch?v=Xt8kuygspOk>

One Button Studio

- Room: hot box, fickle sound, not great locations
- Keep them short! System cannot handle large files
- Very cool when it works

Open Broadcast Software

- The *real* OBS
- Use case: live streaming
- In-office live streaming, snow day streaming

Example

Advent of Code 2018 Day 1



<https://www.youtube.com/watch?v=CJpmXrHyY28>

Zoom

- <https://its.unl.edu/services/zoom/>
- Primarily for video conferencing
- Used by some instructors of "online" camera-to-camera office hours

Misc Tips

- Get good webcam covers
- Keep videos short-and-sweet
- Absolutely need a good mic setup
- Don't underestimate the time commitment

Questions?