

Echo360 Classroom Demonstration

Fall Faculty Ramp Up 2020 - Virtual

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Colorado State University

Echo360 Classroom Demonstration

- Are you teaching in an Echo360 or Distance classroom this Fall? Today we will watch a quick demonstration of a typical classroom configuration. Particularly with COVID-19 class size restrictions and hybrid class configurations, Echo360 captures and live streaming benefits both students and faculty. See what it looks like in the typical classroom.



Echo360 Classroom Demonstration

- Our goal is to help answer your questions and give you the basic knowledge about using Echo360 in your classroom. When you come to campus you can visit your classroom and be equipped with the basic knowledge you need to be successful, recording and using Echo360.



Agenda

- How does it work, and what does it look like in the classroom?
- Best Practices for Echo 360 Lecture Capture
- What do students see when viewing Echo360 recordings?
- What does it do to help students and faculty?
- Which classrooms have lecture capture capability?

What is Echo360?

- Echo360 is our campus-wide lecture capture system that allows instructors to record lectures automatically in 200 + Echo360 equipped classrooms throughout campus.



Echo360 Pod
Recording Device

- Echo360 also provides Universal Capture: Personal software
 - Allows instructors to record lectures from their home or office.

Three Components for Lecture Capture

- Lecture Capture is an automated process that records classes throughout campus, and...it is *FREE!*

1. Video

- Via a Video Camera installed in a classroom



Three Components for Lecture Capture

2. Audio - Recorded with a microphone:



Clip on
Lavalier Mics



Handheld
Student Mics



Ceiling Mics



Boundary Mics

Three Components for Lecture Capture

3. Screen Capture

- Whatever is being projected



Document Camera

Lectern PC

Laptop w/ PowerPoint...

The Podium



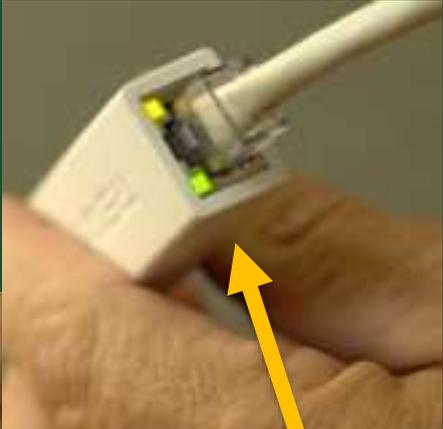
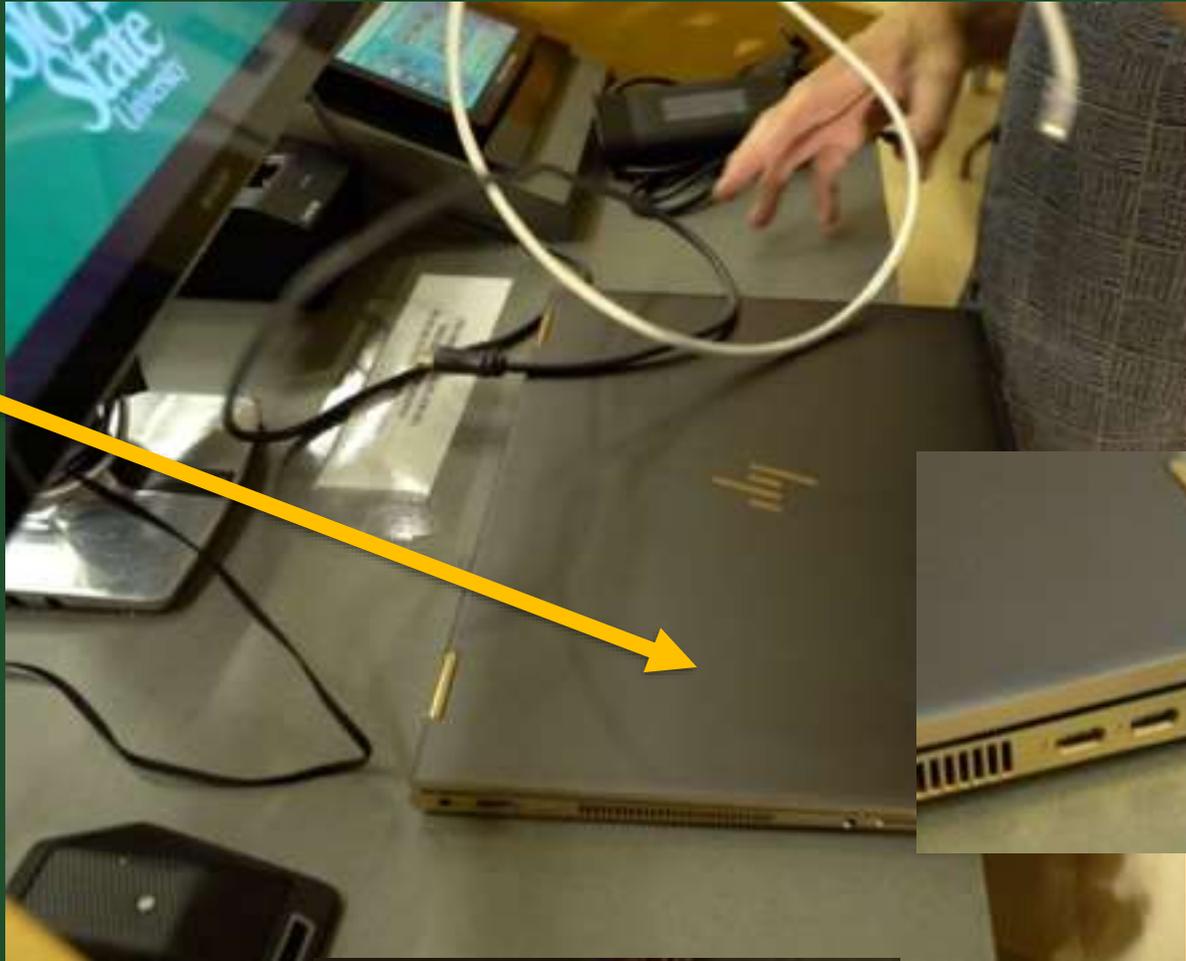
The Crestron Control Panel

Turn
System
On

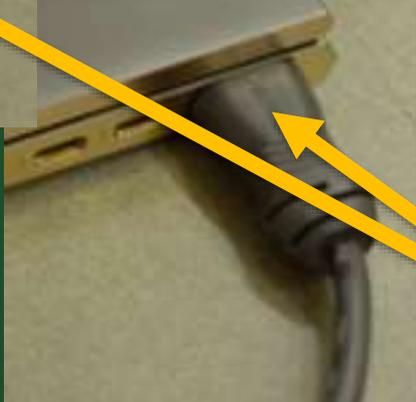


Hook up Device

Hook up laptop device, or use lectern PC, or Doc Cam



Ethernet

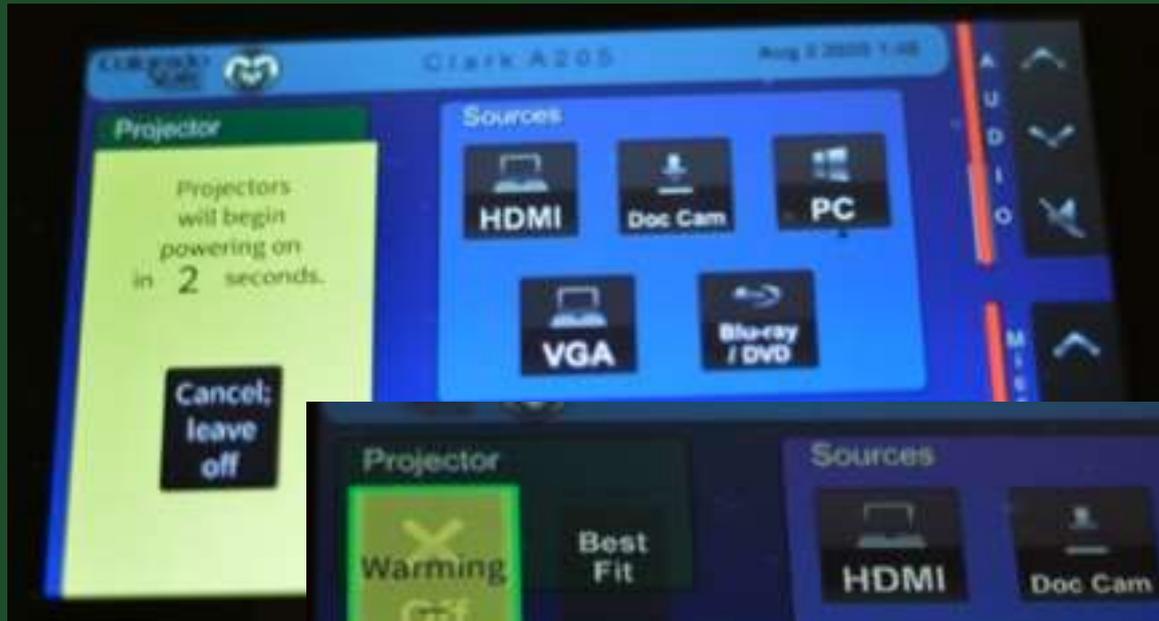


HDMI

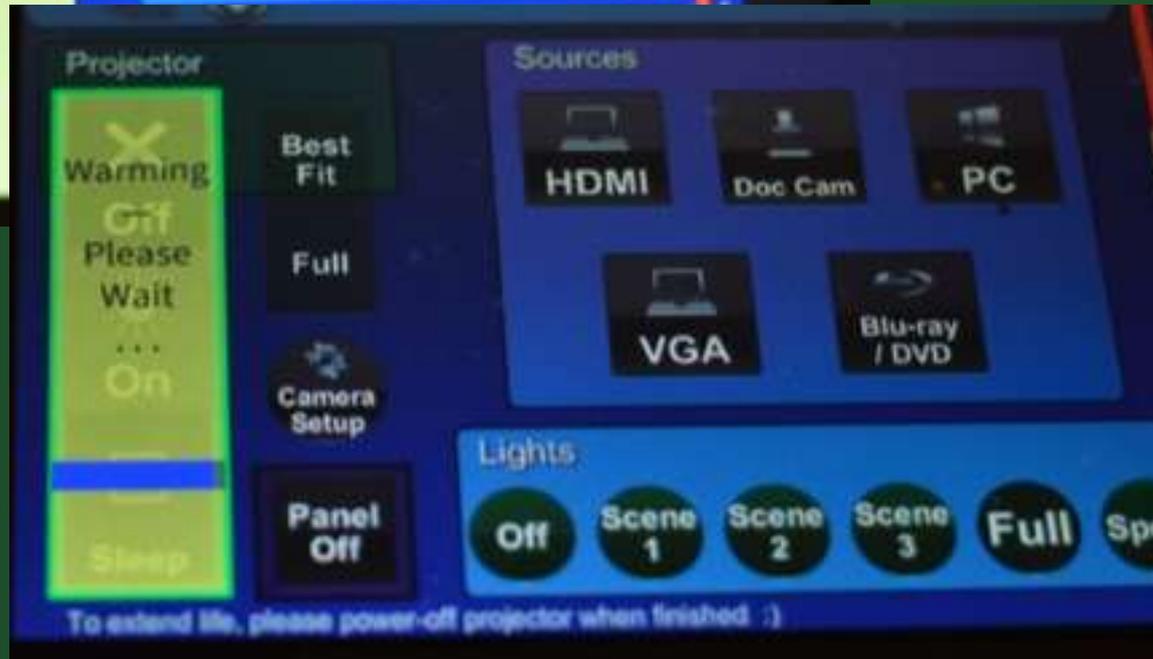
USB



The Podium



Select Device

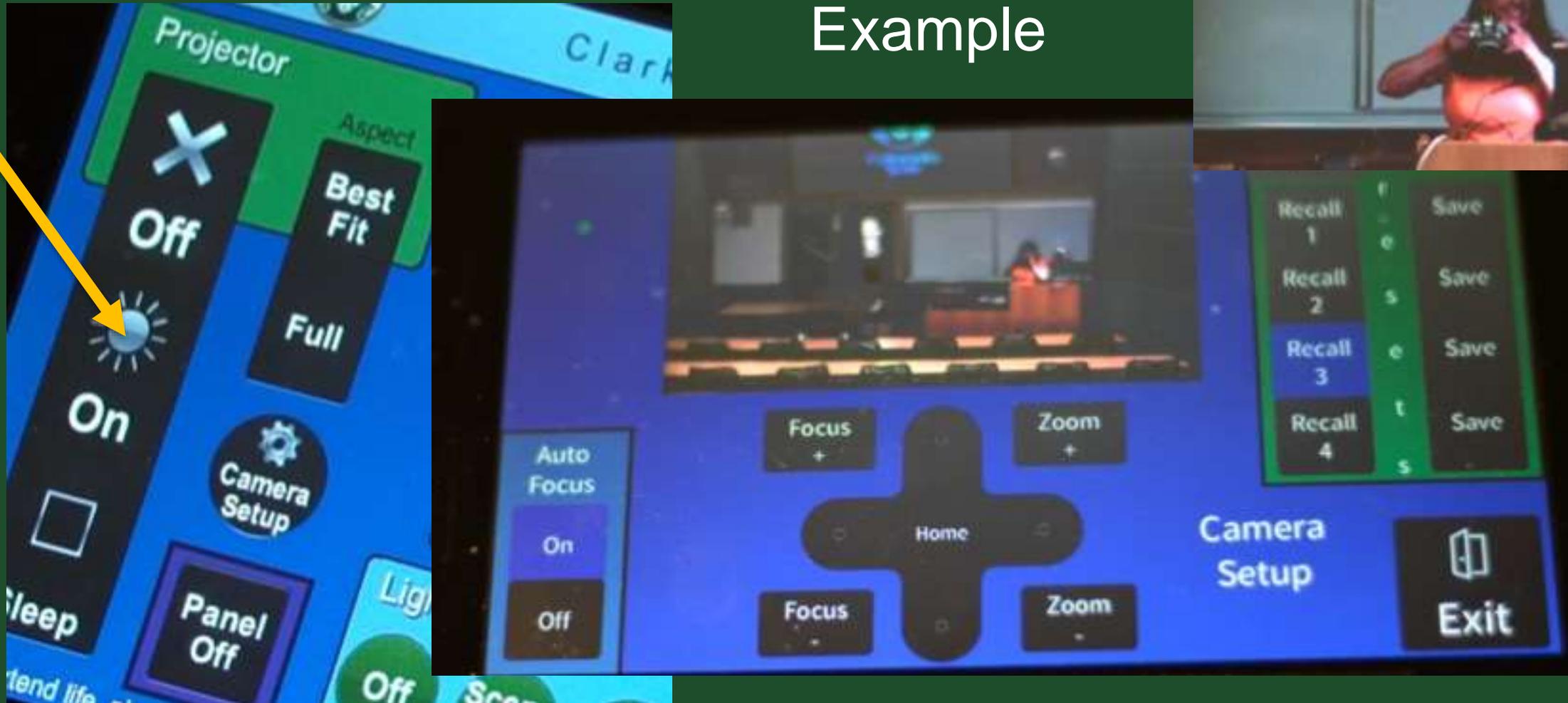


The Mic



Set a Camera Shot

Clark A Wing
Example



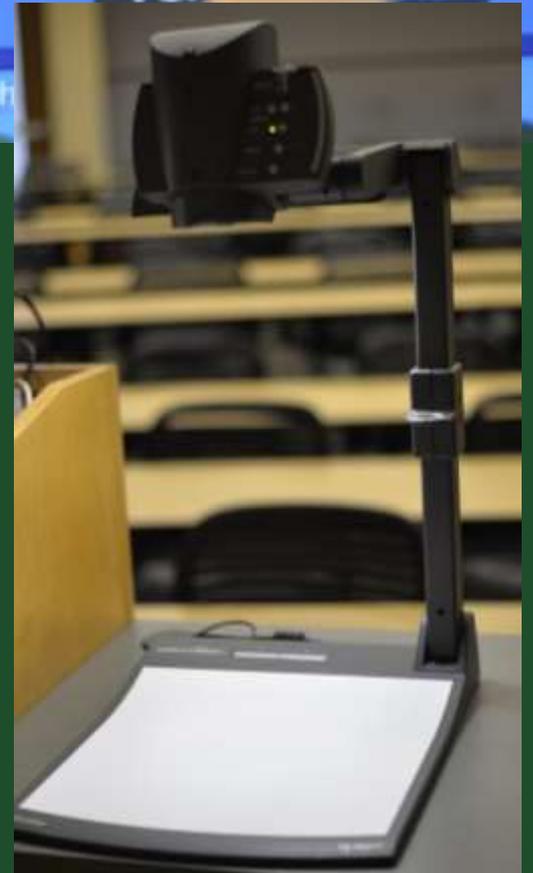
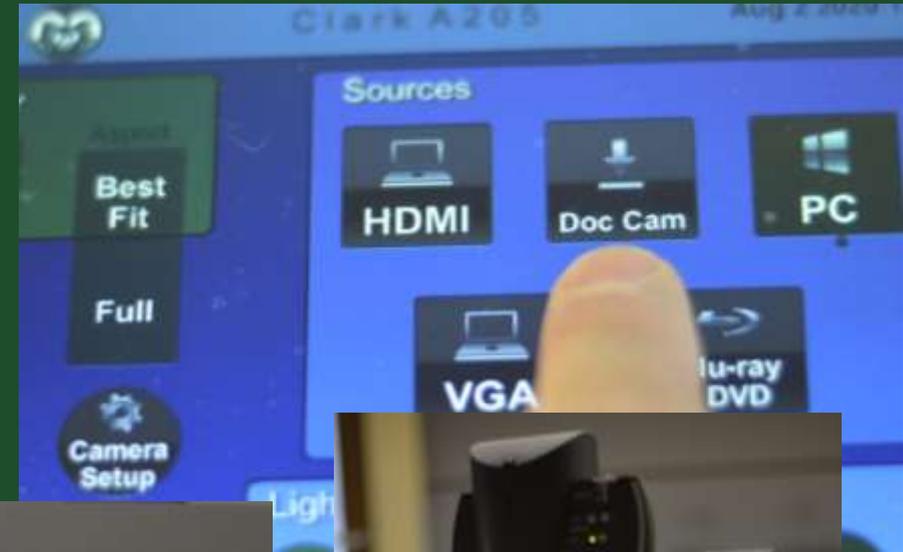
Set a Camera Shot



Most Classrooms do not have a Camera display on the Crestron.

- Choose from three shots: closeup or tight shot, medium shot, or wide shot.
- First day of class, use #1-close up and stay near podium. At end of class choose #2-medium and then #3-wide and watch first video to see the different composition of camera choices.

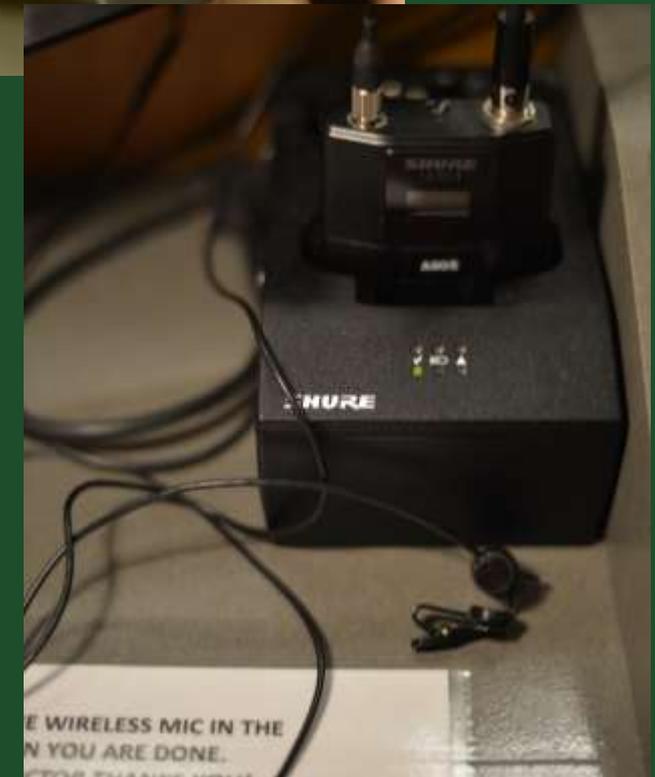
Other Devices



Power on
Lectern
PC

Best Practices for Echo360

- Audio
 - Turn mic on, look for green light
 - Wear mid sternum in middle of chest
 - Be gentle with beltpac, leave wire loose, don't wind tight
 - When finished, place beltpac firmly in charger, light turns on

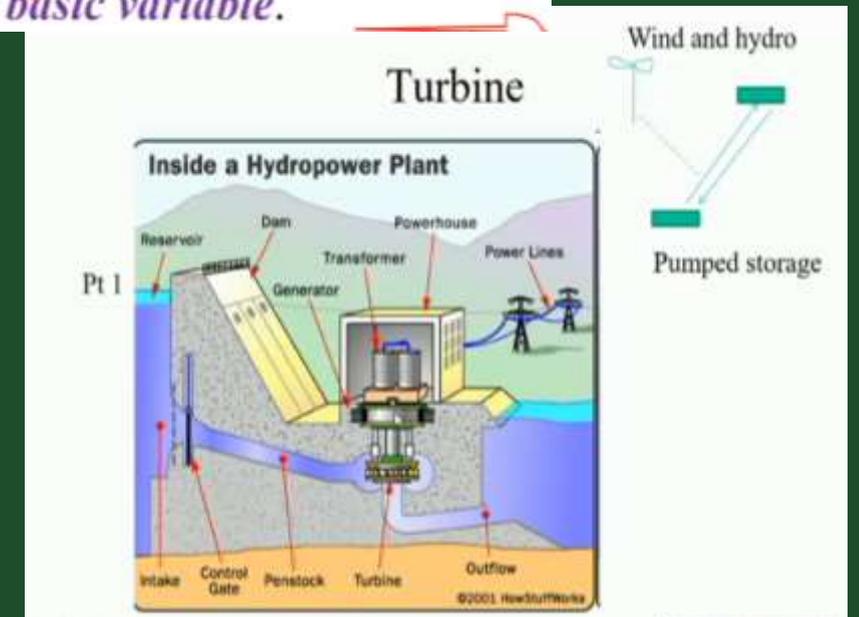


Best Practices for Echo360

- Screen/Slides
 - Use a large font, 24pt or above - This is 40 point
 - Use High Contrast colors
 - Limit to seven lines of text or start a new slide
 - Include pictures and graphics as much as possible to help communicate your content

Pricing Out—Improving Solution

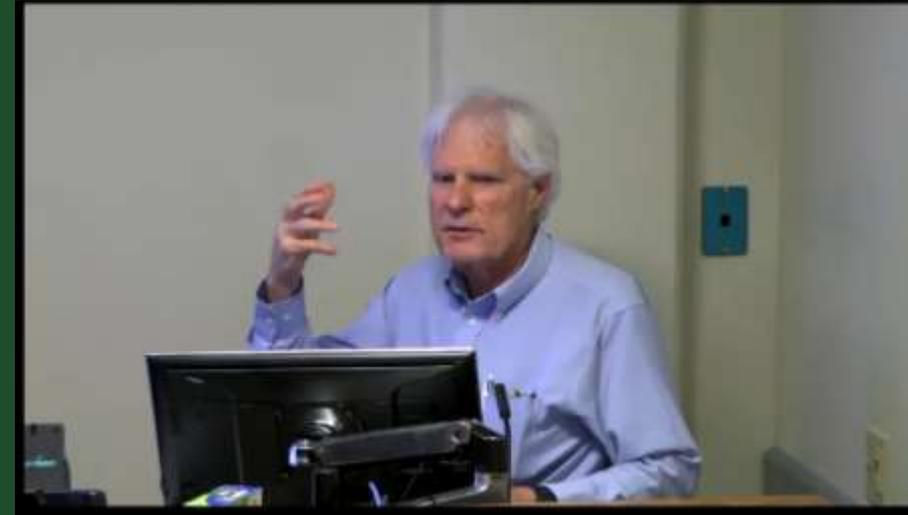
- Finding the **most negative** component c_i of reduced costs \hat{c}_N called **pricing out**.
- Increasing corresponding component x_i of x_N causes z to further **decrease**; x_i becomes *new basic variable*.



Best Practices for Echo360

- Camera/Video

- Use close up shot when you can so students can get to know you



- Avoid wearing stripes –camera can't focus

- Turn on podium lights for camera

- Look up at the camera to include the live streaming students

Best Practices for Echo360

- Live Stream – Champion Student
 - Have a student in the classroom assigned to watch the live stream and report any issues
 - Have an Online student watching the live stream and report any issues:
 - Cell phone
 - Email
 - Your preference

Example of What Students See

DCE-DotsonJ Administrator
2017FA-CIVE-544-001

2017-FALL-Term

2017FA-CIVE-544-001: Water Resources Planning a...

[Edit](#) [Settings](#)

Course Status: Unpublish Published

[Import from Commons](#)

[View Course Stream](#)

[New Announcement](#)

[View Course Analytics](#)

Coming Up [View Calendar](#)
Nothing for the next week

Home

- Announcements
- Assignments
- Conferences
- Discussions
- Grades
- Modules
- Pages
- People
- Quizzes
- Syllabus
- Echo360
- Collaborations
- Files
- Outcomes
- Settings

Water Cycle Diagram: A cross-sectional diagram of the water cycle. It shows precipitation falling as rain or snowpack on a mountain. Snowpack melts into runoff, which flows into a stream. The stream flows through a forested area (Foreland) and then through a dam. The water then flows into a reservoir (Lake) and finally into the Ocean. Labels include: Precipitation, snowpack, Runoff, Forestland, Dams, Reservoir, Lake, and Ocean.

City Skyline: A photograph of a city skyline, likely New York City, with many skyscrapers reflected in the water.

Hand Holding Earth: A photograph of a hand holding a small globe of the Earth, with water splashing around it.

Slum: A photograph of a densely packed, informal settlement (slum) built on a hillside.

Mountain Lake: A photograph of a clear, turquoise mountain lake surrounded by rocky shores and green mountains under a blue sky with white clouds.

Example of What Students See

The screenshot displays the Canvas LMS interface for a course. The top navigation bar includes 'Save Edits', 'Dashboard', 'Library', and 'Courses'. The course title is '2017FA-CIVE-544-001: Water Resources Planning and Management'. The left sidebar contains navigation links: Home, Announcements, Assignments, Conferences, Discussions, Grades, Modules, Pages, People, Quizzes, Syllabus, Echo360 (highlighted), Collaborations, Files, Outcomes, and Settings. The main content area shows a list of classes for 'CIVE 544 - 801 - Neil Grigg Water Resour...'. Each class entry includes a name, a date, a time, and a set of icons for actions like adding, deleting, and viewing.

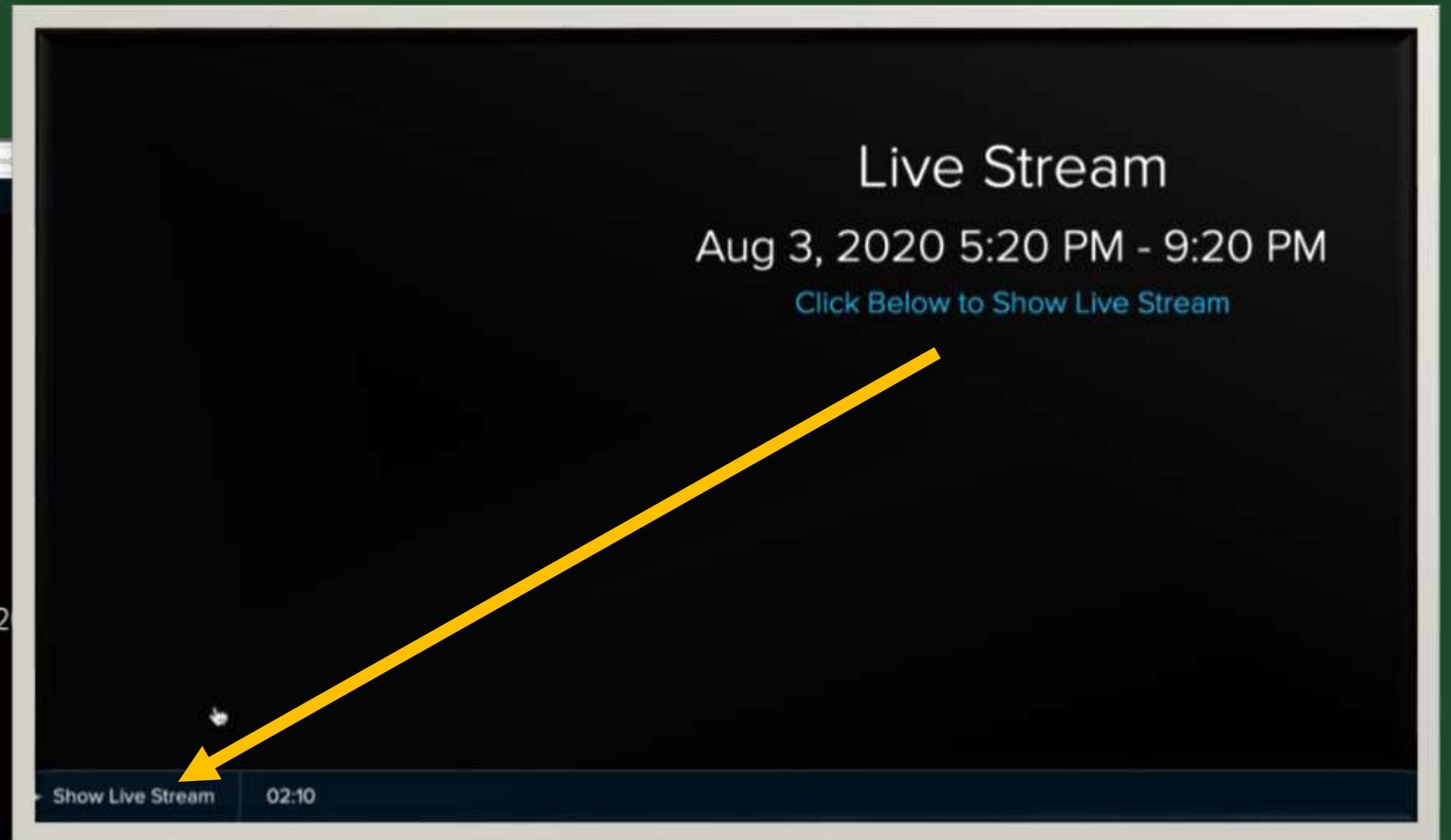
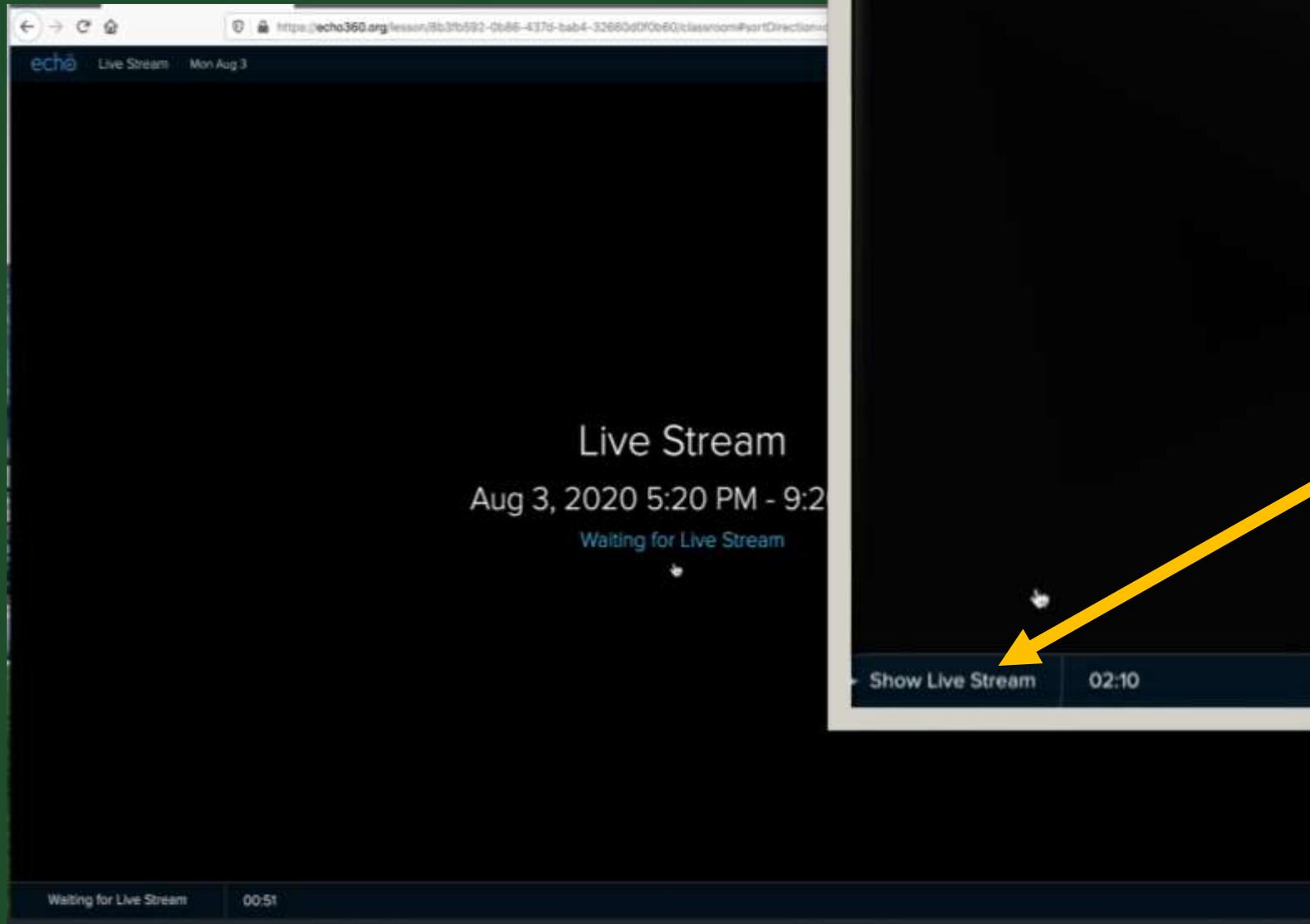
Class Name	Date	Time	Actions
CIVE 544-801 - Neil Grigg	December 8, 2017	1:59pm-2:51pm	[Add] [Delete] [View] [Edit]
CIVE 544-801 - Neil Grigg	December 6, 2017	1:59pm-2:51pm	[Add] [Delete] [View] [Edit]
CIVE 544-801 - Neil Grigg	December 4, 2017	1:59pm-2:51pm	[Add] [Delete] [View] [Edit]
CIVE 544-801 - Neil Grigg	November 29, 2017	1:59pm-2:51pm	[Add] [Delete] [View] [Edit]
CIVE 544-801 - Neil Grigg	November 27, 2017	1:59pm-2:51pm	[Add] [Delete] [View] [Edit]
CIVE 544-801 - Neil Grigg	November 17, 2017	1:59pm-2:51pm	[Add] [Delete] [View] [Edit]
CIVE 544-801 - Neil Grigg	November 15, 2017	1:59pm-2:51pm	[Add] [Delete] [View] [Edit]
CIVE 544-801 - Neil Grigg	November 13, 2017	1:59pm-2:51pm	[Add] [Delete] [View] [Edit]
CIVE 544-801 - Neil Grigg	November 10, 2017	1:59pm-2:51pm	[Add] [Delete] [View] [Edit]
CIVE 544-801 - Neil Grigg	November 8, 2017	1:59pm-2:51pm	[Add] [Delete] [View] [Edit]
CIVE 544-801 - Neil Grigg	November 6, 2017	1:59pm-2:51pm	[Add] [Delete] [View] [Edit]

Example of What Students See

The screenshot displays the Echo360 interface for an Academic Technology Unit. The top navigation bar includes 'Library', 'Courses', 'Groups', and a 'Create' button. The main content area shows a list of classes with columns for title, date, and time. A yellow arrow points from the 'Live Stream' button in the bottom left to a 'Stream LIVE' button in a highlighted box. The highlighted box also contains a hand cursor icon and the text 'upload - Add to a Class'.

Class Title	Date	Time	Stream
Uninstalling Echo Personal Capture (PCap) Software	March 1, 2020	3:48pm-4:48pm	Stream
Install Echo360 Universal Capture for your Desktop or Laptop Recordings	March 1, 2020	4:07pm-5:07pm	Stream
Request Echo360 Semester Recordings and Universal Capture Intro	March 10, 2020	12:08am-1:08am	Stream
How to use Echo360 Universal3-17		12:25am-11:28am	Stream
How to Use Echo360 Universal Capture		12:00am-8:00am	Stream
Link Echo360 to Canvas Section		12:27pm-3:27pm	Stream
Editing Echo360 Videos		7:14am-8:14am	Stream
Test live stream		11:46am-11:47am	Stream
ATU-Echo360 Faculty Demonstration Video		12:00am-11:32am	Stream
Testing Live Stream		5:13pm-5:15pm	Stream
How to upload - Add to a Class - Create Links in Echo360	April 1, 2020	4:23pm-5:23pm	Stream

Example of What Students See



Example of What Students See

Turbine

Inside a Hydropower Plant

Reservoir, Dam, Powerhouse, Power Lines, Generator, Transformer, Pt 1, Intake, Control Gate, Penstock, Turbine, Outflow

©2001 HowStuffWorks

Wind and hydro

Pumped storage

36:17 / 49:11

The diagram illustrates the components of a hydroelectric power plant. It shows a reservoir at the top, a dam, a powerhouse containing a generator and transformer, and power lines. A penstock leads from the reservoir to a turbine in the powerhouse. The turbine is connected to a generator. The water then flows out through an outflow. A separate diagram shows a pumped storage system where water is pumped from a lower reservoir to a higher one, and then released through a turbine to generate power. The video player shows a progress bar at 36:17 / 49:11.

Dashboard Captures Rooms Courses Groups Users Imports/Exports

echo

77

Contribution of urea to the osmotic pressure gradient of kidney ISF

Outer Medulla, Inner Medulla

- [Urea] is progressively increased before collecting duct entering inner medulla
- inner medulla collecting duct has urea transporters
- [Urea] in urine is set by its highest concentration in kidney ISF
- Massive urea enters descending limb and descending vasa recta (recycle of urea)

15:43 / 49:37

Sources

The screenshot shows a video lecture interface. At the top, there is a navigation bar with options like Dashboard, Captures, Rooms, Courses, Groups, Users, and Imports/Exports. The main content area is split into two parts: a video of a presenter on the left and a slide on the right. The slide is titled "Contribution of urea to the osmotic pressure gradient of kidney ISF" and features a diagram of the kidney's collecting duct system, showing the outer and inner medulla. The diagram labels various parts like the collecting duct, descending limb, and vasa recta. A list of bullet points explains the role of urea in the osmotic pressure gradient. The video player at the bottom shows a progress bar at 15:43 / 49:37 and a "Sources" button.

Example of What Students See

https://echo360.org/lesson/Q_f85df51a-c7f0-4fc5-b51b-cfb61905f743_e2cc5e0f-4435-4d7c-b496-c5f1

ENGR 510 801 John Lebedie 2019 ... Wed Sep 25

ENGR 510 - Engineering O...

Pricing Out—Improving Solution

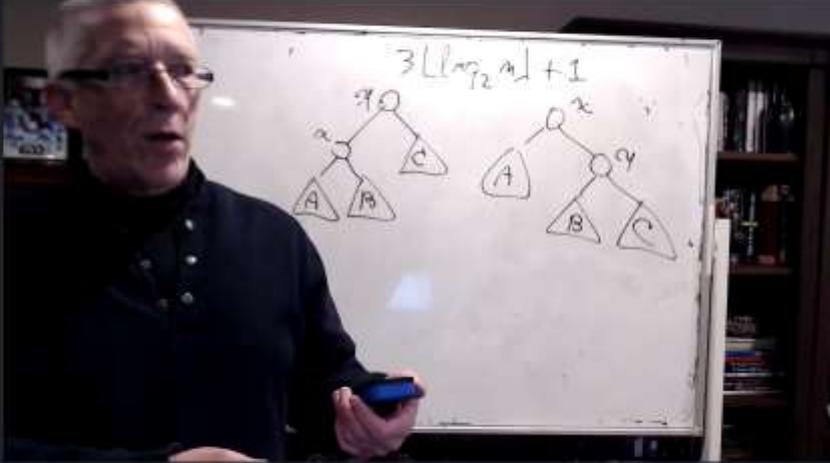
- Finding the **most negative** component c_i of reduced costs \bar{c}_N called **pricing out**.
- Increasing corresponding component x_i of x_N causes z to further **decrease**; x_i becomes **new basic variable**.
- At the same time, decreasing component x_s of x_B (**to 0**), as selected by the **ratio test** (described subsequently), has **no effect** on z since it has a 0 cost coefficient

13

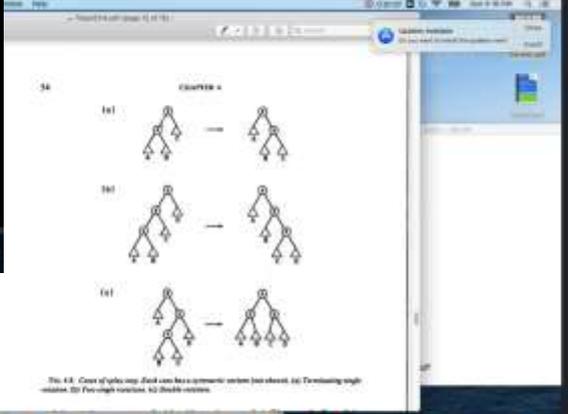


ENGR 510

Rooms Courses Groups Users Imports/Exports



$3 \lfloor \log_2 n \rfloor + 1$



51:12 / 1:10:29

How do I Lecture Capture?

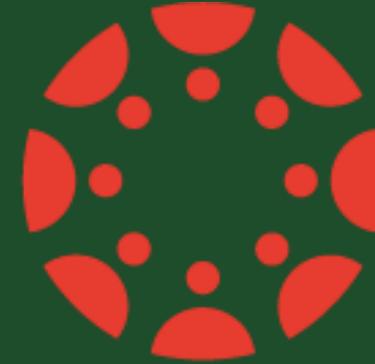
- For Fall 2020, all classes scheduled in Banner will automatically have an Echo360 Course and Section created, and faculty assigned.
- All sections scheduled in an Echo360 Enabled Classroom will automatically have their Recording Scheduled created
- Faculty who do not wish to record can choose to do nothing, or they can Opt Out for:
 - Cancel recordings for all their classes
 - Cancel recordings for only specific classes

See: <http://help.echo.colostate.edu>



How Does Lecture Capture Benefit Students?

- Students can watch at their own speed
- Students can re-watch content
- Canvas integration
- Echo360 Collaborative Tools
 - Students can take notes via the Echo360 interface
 - Students can “bookmark” specific areas of recordings
 - Students can participate in discussions via Echo360 interface
 - Students can indicate “areas of confusion”



canvas

How Does Lecture Capture Benefit Students?

- Viewing via Echo360 mobile app
- Helps students with different learning styles
- Helps international and ESL students
- Adds value to the course
- Reduce impact of sick days and absences
- Use of electronic data feed is more visible than whiteboard
 - Doc cam, Computer screen, or what is being projected



What's in it for me?

- Students will like you more
 - UTFAB has made it a priority to increase lecture capture
 - Univ. of Toledo Trigonometry class study
 - Failure rates decreased from 28% to 4%
 - COVID – 19 restricted students will have the opportunity to watch your lectures and keep up with your classes
 - Hybrid taught classes will allow students to watch a lecture live one day, and on line another day, allowing for smaller class sizes, to meet social distancing requirements.

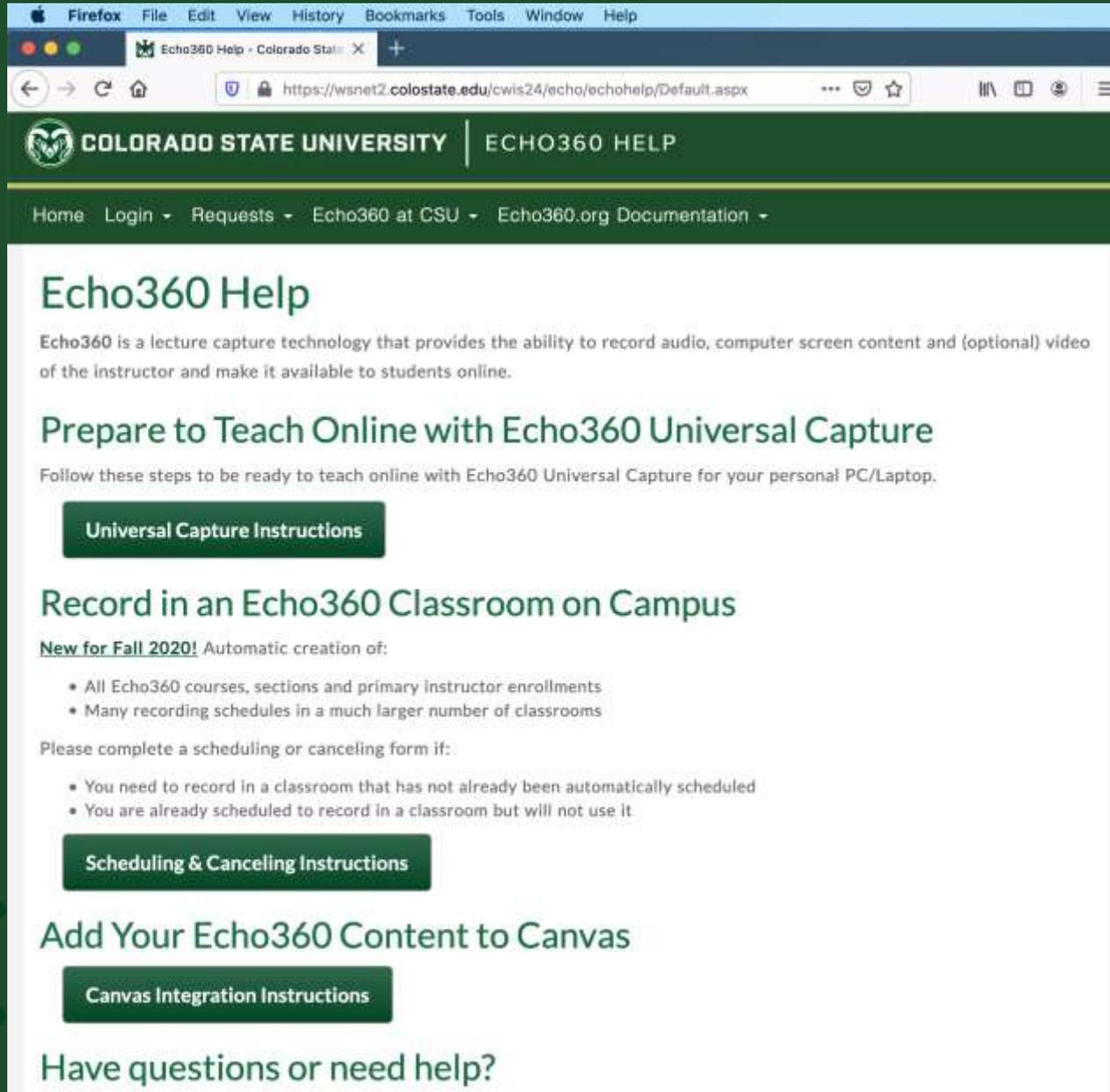
What's in it for me?

- You will have access to viewer analytics
 - Are students watching your recordings?
- You can use data and student questions to inform instruction
 - Note taking, confusion flags, discussions, bookmarks, transcripts, (Closed Caption available at a fee for disabilities.)
- Your courses are archived for future use

What's in it for me?

- Professional conference? Out for a week?
 - Pre-record
 - Use last term's recordings
- Evaluate your own in-class performance
 - Watch and listen
 - Evaluate visuals and content
 - Media professionals do this daily to improve their presentation

Lecture Capture Rooms



Echo360 Help

Echo360 is a lecture capture technology that provides the ability to record audio, computer screen content and (optional) video of the instructor and make it available to students online.

Prepare to Teach Online with Echo360 Universal Capture

Follow these steps to be ready to teach online with Echo360 Universal Capture for your personal PC/Laptop.

[Universal Capture Instructions](#)

Record in an Echo360 Classroom on Campus

New for Fall 2020! Automatic creation of:

- All Echo360 courses, sections and primary instructor enrollments
- Many recording schedules in a much larger number of classrooms

Please complete a scheduling or canceling form if:

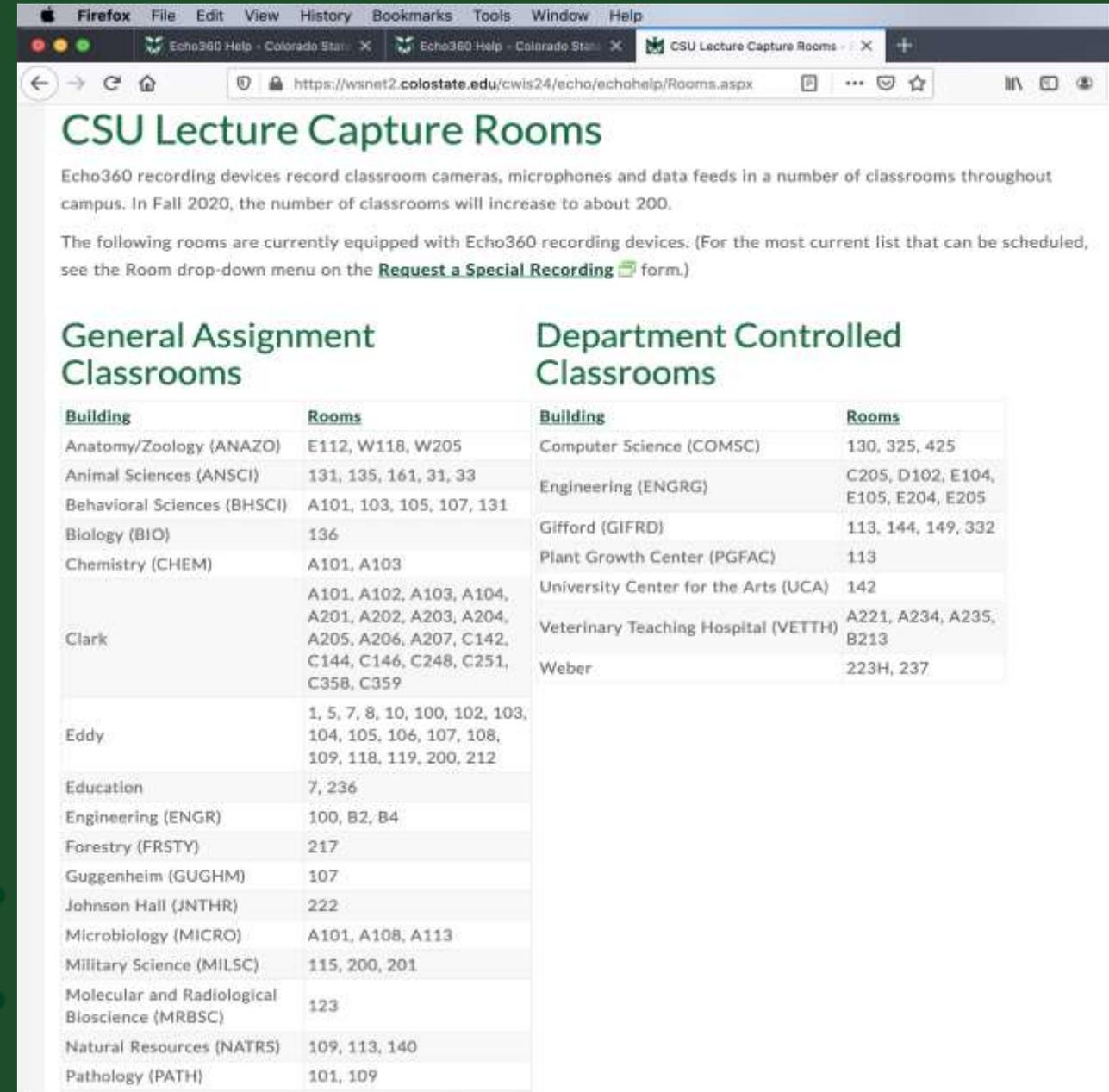
- You need to record in a classroom that has not already been automatically scheduled
- You are already scheduled to record in a classroom but will not use it

[Scheduling & Canceling Instructions](#)

Add Your Echo360 Content to Canvas

[Canvas Integration Instructions](#)

Have questions or need help?



CSU Lecture Capture Rooms

Echo360 recording devices record classroom cameras, microphones and data feeds in a number of classrooms throughout campus. In Fall 2020, the number of classrooms will increase to about 200.

The following rooms are currently equipped with Echo360 recording devices. (For the most current list that can be scheduled, see the Room drop-down menu on the [Request a Special Recording](#) form.)

General Assignment Classrooms		Department Controlled Classrooms	
Building	Rooms	Building	Rooms
Anatomy/Zoology (ANAZO)	E112, W118, W205	Computer Science (COMSC)	130, 325, 425
Animal Sciences (ANSCI)	131, 135, 161, 31, 33	Engineering (ENGRG)	C205, D102, E104, E105, E204, E205
Behavioral Sciences (BHSCI)	A101, 103, 105, 107, 131	Gifford (GIFRD)	113, 144, 149, 332
Biology (BIO)	136	Plant Growth Center (PGFAC)	113
Chemistry (CHEM)	A101, A103	University Center for the Arts (UCA)	142
Clark	A101, A102, A103, A104, A201, A202, A203, A204, A205, A206, A207, C142, C144, C146, C248, C251, C358, C359	Veterinary Teaching Hospital (VETTH)	A221, A234, A235, B213
Eddy	1, 5, 7, 8, 10, 100, 102, 103, 104, 105, 106, 107, 108, 109, 118, 119, 200, 212	Weber	223H, 237
Education	7, 236		
Engineering (ENGR)	100, B2, B4		
Forestry (FRSTY)	217		
Guggenheim (GUGHM)	107		
Johnson Hall (JNTHR)	222		
Microbiology (MICRO)	A101, A108, A113		
Military Science (MILSC)	115, 200, 201		
Molecular and Radiological Bioscience (MRBSC)	123		
Natural Resources (NATRS)	109, 113, 140		
Pathology (PATH)	101, 109		

Resources

- <http://help.echo.colostate.edu>
<http://echo360.org>
- <http://help.echo360.org/>
- Email – echo360help@colostate.edu
 - Marianne.Bauer@colostate.edu
 - Ed.Gudemann@colostate.edu

Questions?



Thank you



Colorado State University