

Introduction to Echo360

Lecture Capture in the Classroom

Fall Faculty Ramp Up 2020 - Virtual

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Colorado State University

Agenda

- What is *Lecture Capture*?
- How do I *Lecture Capture*?
- How does *Lecture Capture* benefit students?
- What's in it for me?
- Strategies/Best Practices?
- Echo360 Universal Capture: Personal
- What do students see? Echo360 Demo



Interesting Tidbits

- Approximately 136 class sections were recorded, Fall, 2019
- 5,530 Scheduled Captures
 - Resident Instruction (approx. 72 sections, 216 hours/week)
 - CSU Online (approx. 64 sections, 192 hours/week)
- Nearly 725 Personal Capture (PCap) recordings, Fall, 2019
 - 8.5% of lecture capture viewership
- Prominent Users
 - CSU Online, CVMBS, Natural Sciences, Engineering

A white rectangular box containing the text "RANDOM LITTLE TiDBiTS" in a black, sans-serif font. The word "RANDOM" is on the top line, "LITTLE" is on the second line, and "TiDBiTS" is on the third line. The "i" in "TiDBiTS" is lowercase and has a dot above it.

RANDOM
LITTLE
TiDBiTS

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...

Poll 1

I have used Lecture Capture in the past.



Lecture Capture Rooms

Classrooms listed on the next few pages have an activated Echo Pod, and more are being added every day, so check back often.

Department rooms are still ordering upgrade equipment.

General Assignment Classrooms

<u>Building</u>	<u>Rooms</u>
Anatomy/Zoology (ANAZO)	E112, W118, W205
Animal Sciences (ANSCI)	131, 135, 161, 31, 33
Behavioral Sciences (BHSCI)	A101, 103, 105, 107, 131
Biology (BIO)	136
Chemistry (CHEM)	A101, A103
Clark	A101, A102, A103, A104, A201, A202, A203, A204, A205, A206, A207, C142, C144, C146, C248, C251, C358, C359

Lecture Capture Rooms

General Assignment Classrooms

<u>Building</u>	<u>Rooms</u>
Eddy	104, 105, 106, 107, 109, 118, 119, 200,
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

Lecture Capture Rooms

General Assignment Classrooms

<u>Building</u>	<u>Rooms</u>
Physiology (PHYSL)	103, 243
Plant Science (PLSCI)	C101
Scott Bioengineering (SCOTT)	101, 229, 231
Stadium (STADM)	1203, 1204, 1205, 1207, 1208, 1213, 1214, 1215, 1216
The Institute for Learning and Teaching (TILT)	221
Visual Arts (ART)	F101, F113
Wagar	107, 132, 133, 231, 232
Walnut (WALNT)	103, 105, 108, 109, 110, 111, 115, 118
Weber	202
Yates	104

Lecture Capture Rooms

Department Controlled Classrooms

<u>Building</u>	<u>Rooms</u>
Computer Science (COMSC)	130, 325, 425
Engineering (ENGRG)	C205, D102, E104, E105, E204, E205
Gifford (GIFRD)	113, 144, 149, 332
Plant Growth Center (PGFAC)	113
University Center for the Arts (UCA)	142
Veterinary Teaching Hospital (VETTH)	A221, A234, A235, B213
Weber	223H, 237

More classrooms are becoming Echo360 Enabled – 200 Plus

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 do I Lecture Capture?

- Show up!
 - Put the mic on (turn it on)
 - Teach



How do I Lecture Capture?

The screenshot shows a video library interface with the following elements:

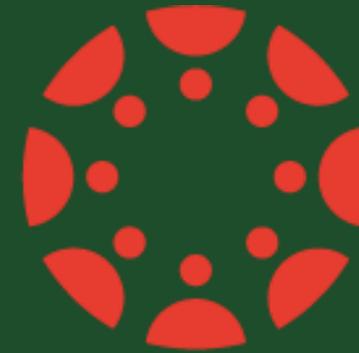
- Navigation tabs: Library, Courses, Groups, and a blue 'Create' button.
- Search bar: 'Search Content' with a magnifying glass icon.
- Sort by: 'Date Created' with a dropdown arrow and a downward arrow icon.
- Video grid (6 items):
 - ATU-Echo360 Faculty Demonstration Video** (2:32:36, 5 days ago) by Marianne Bauer. Thumbnail shows the Colorado State University logo.
 - Test live stream** (00:46, 25 days ago) by Marianne Bauer. Thumbnail shows a computer screen with a list.
 - Editing Echo360 Videos and Linking to specific sections.mp4** (06:28, 2 months ago) by Marianne Bauer. Thumbnail shows a list of steps for editing videos.
 - MBauer Demo Reel-Final.mp4** (02:40, 4 months ago) by Marianne Bauer. Thumbnail shows a video editor interface.
 - How to Use Echo360 Universal Capture.mp4** (09:19, 4 months ago). Thumbnail shows a scenic view of a field with purple flowers.
 - How to Use Echo360 Universal Capture.mp4** (18:00, 4 months ago). Thumbnail shows a Colorado State University logo and a video player interface. A context menu is open over this video with options: View, Share, and Edit Media.

- After class, your recording will upload and be available for viewing *automatically*



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



Poll 2

I have taught Online in the past.



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

August 28, 2019 4:00pm-5:19pm		
September 4, 2019 4:00pm-5:17pm		



Dashboard Captures Rooms Courses Groups Users Imports/Exports

ENGR 510 - 801 John Labadie Engineering Optimization: Method/Application CLASSES

NEW QUESTION Aug 28 - ENGR 510 801 John Labadie 2019 Fall 4:00 ... Search

Aug 28 - ENGR 510 801 John Labadie 2019 Fall 4:00 p... Aug 28, 2019 4:27 PM

Can intractable problems (too big to solve) qualify as ill-defined, even if they're technically solvable?

Aug 28 - ENGR 510 801 John Labadie 2019 Fall 4:00 pm - 5:15 pm

Can intractable problems (too big to solve) qu

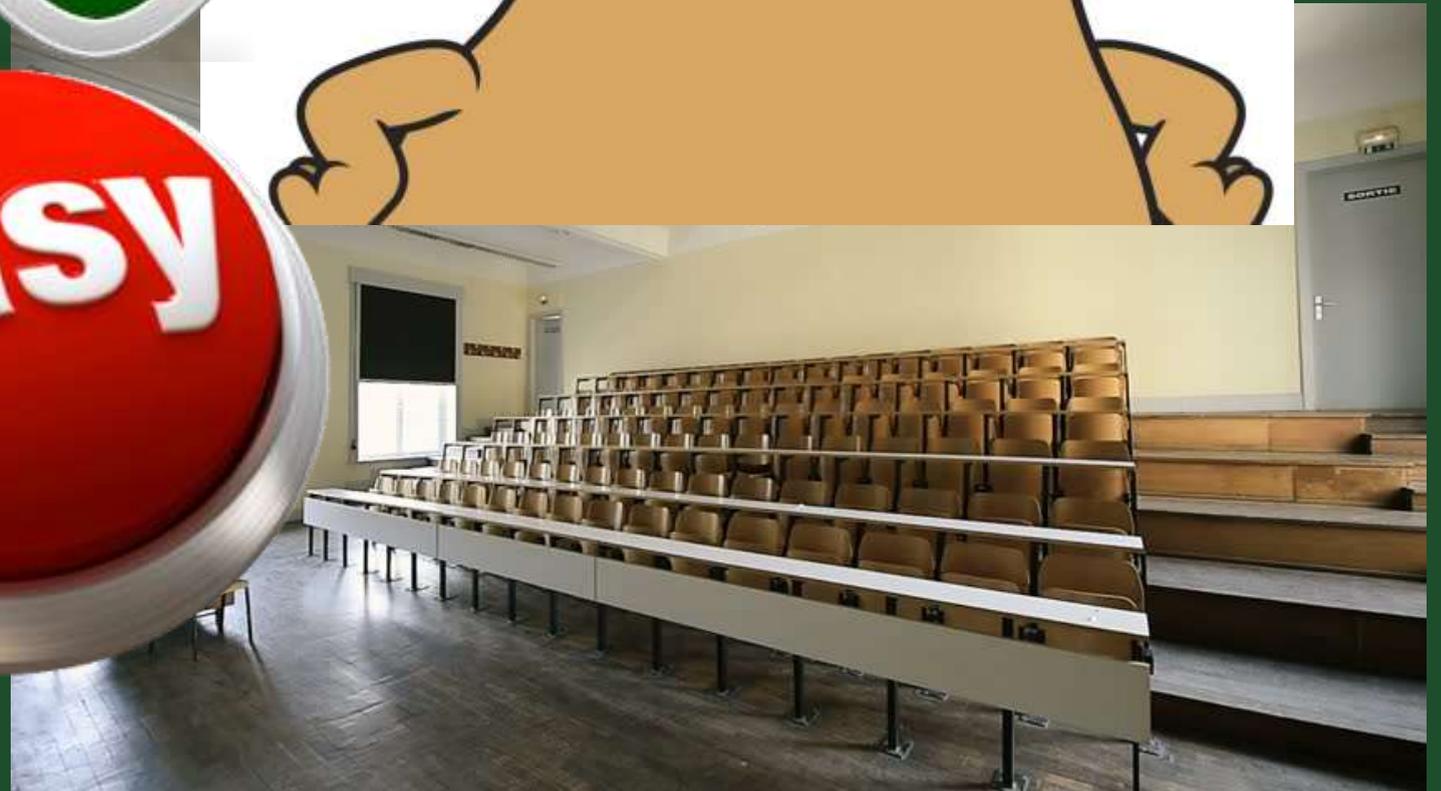
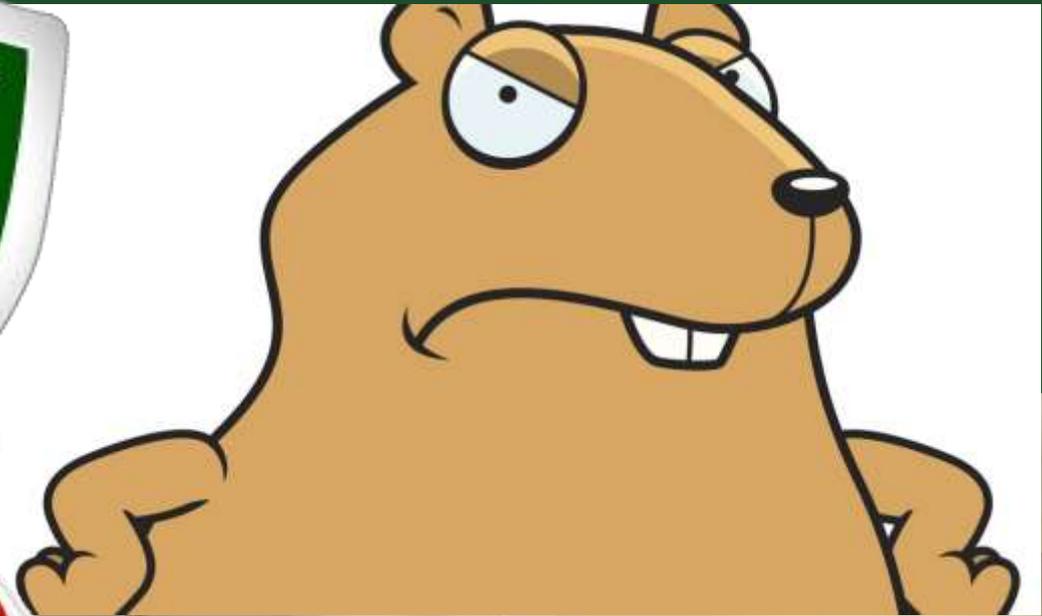
What's in it for me?

- 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



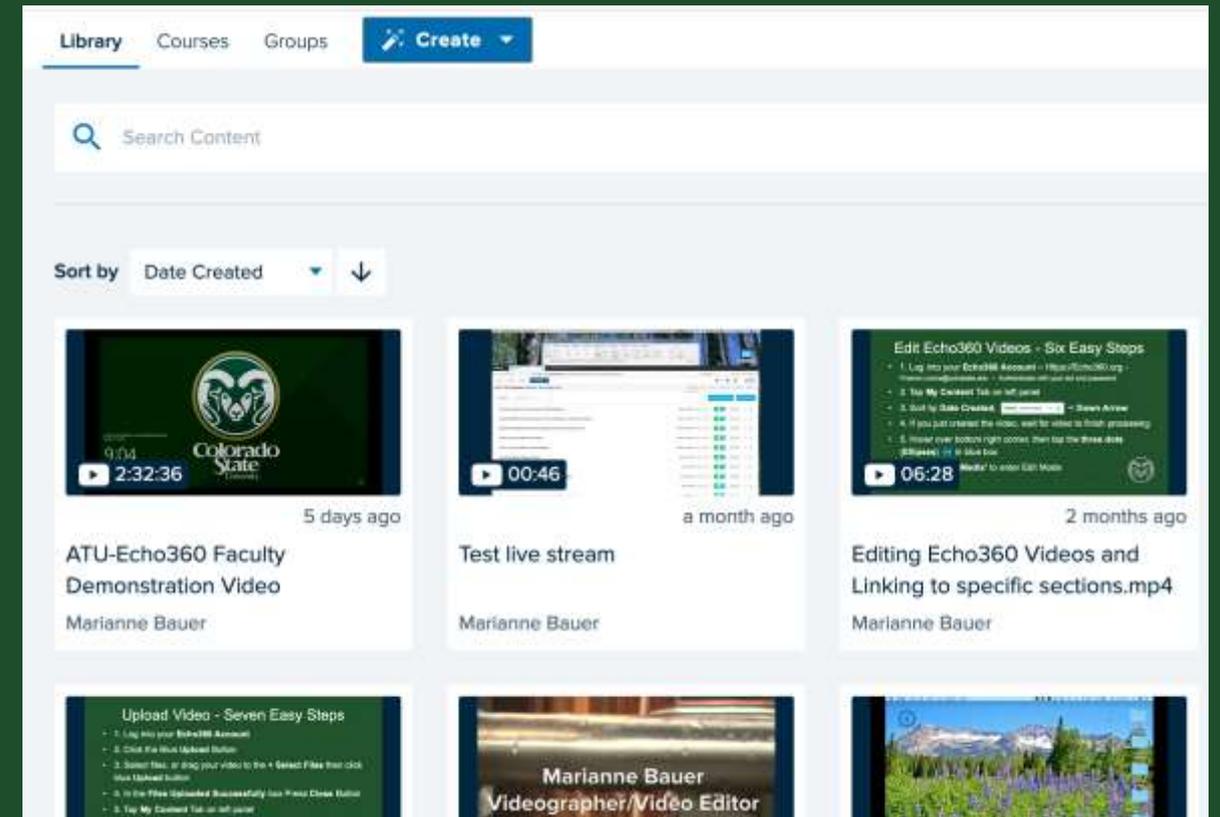
Common Objections

- No one will come to my class
- My hair looks awful
- I sound like a gerbil
- I'll lose control of my content
- It's a pain to record



Strategies/Best Practices

- Evaluate your teaching style
 - Use it or not
 - You control your content
- Put it in “the can”
 - Keep your content for later use
- Flip your classroom
 - Have students view pre-recorded lectures and use class time for discussion, projects, case studies, applied skills!
- Augment your in-class material with Universal Capture videos



Echo360 Universal Capture

- Install software on your own computer
 - PC or Mac – home or office
- Records camera, mic and computer screen - camera is optional
- See Echo Help website for more details

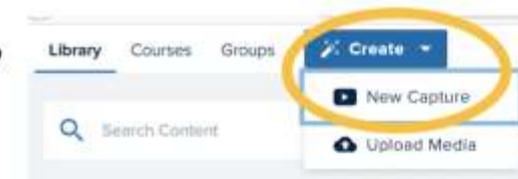
1. Log into your Echo360 Account:

a. 

b. 

c. 

2. Under the **Create** button, select **New Capture**.



- a. First time users will be redirected to the install website. Install Echo360 Universal Capture: Personal on your device.
- b. For current users tap the **New Capture** button to launch The Echo360 Universal Capture app on your device.
- c. You can also just launch the app by locating the Echo360 icon  and launching your app.

Example of What Students See

The screenshot displays a Canvas LMS interface for a course titled "2017FA-CIVE-544-001: Water Resources Planning a...". The user is logged in as "DCE-DotsonJ Administrator".

Navigation Sidebar (Left):

- Canvas
- Account
- Admin
- Dashboard
- Courses
- Calendar
- Inbox (3 items)
- Commons
- Help
- Quick Links

Course Header:

- 2017-FALL-Term
- 2017FA-CIVE-544-001
- 2017FA-CIVE-544-001: Water Resources Planning a... (with Edit and Settings buttons)

Course Status (Right):

- Unpublish
- Published
- Import from Commons
- View Course Stream
- New Announcement
- View Course Analytics
- Coming Up (View Calendar)
- Nothing for the next week

Main Content Area:

- Home (selected)
- Announcements
- Assignments
- Conferences
- Discussions
- Grades
- Modules
- Pages
- People
- Quizzes
- Syllabus
- Echo360 (highlighted with a red arrow)
- Collaborations
- Files
- Outcomes
- Settings

Visuals:

- Water cycle diagram showing precipitation, snowpack, runoff, forestland, homes & roads, dams, factory plants, groundwater, and ocean.
- City skyline (Manhattan).
- Hand holding a globe of Earth.
- Slum area.
- Scenic lake and mountains.

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 options: Home, Announcements, Assignments, Conferences, Discussions, Grades, Modules, Pages, People, Quizzes, Syllabus, **Echo360**, Collaborations, Files, Outcomes, and Settings. The main content area shows a list of classes with the following data:

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

Example of What Students See

The slide features a central diagram titled "Inside a Hydropower Plant" showing a cross-section of a dam and powerhouse. Labels include Reservoir, Dam, Powerhouse, Generator, Transformer, Power Lines, Intake, Control Gate, Penstock, Turbine, and Outflow. To the right, a smaller diagram shows a wind turbine and a pumped storage system. The text "Wind and hydro" is above the pumped storage diagram, and "Pumped storage" is below it. A "Pt 1" label is on the left. A video player interface at the bottom shows a progress bar at 36:17 / 49:11.



The video player interface includes a top navigation bar with "Dashboard", "Captures", "Rooms", "Courses", "Groups", "Users", and "Imports/Exports". The "echo" logo is in the top right. The main content area shows a slide titled "Contribution of urea to the osmotic pressure gradient of kidney ISF" with a diagram of a nephron and a list of bullet points. The presenter is a woman with glasses, wearing a light blue jacket, sitting at a podium. The video player controls at the bottom show a progress bar at 15:43 / 49:37.

Dashboard Captures Rooms Courses Groups Users Imports/Exports echo

Contribution of urea to the osmotic pressure gradient of kidney ISF

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- [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)

36:17 / 49:11

15:43 / 49:37 Sources

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

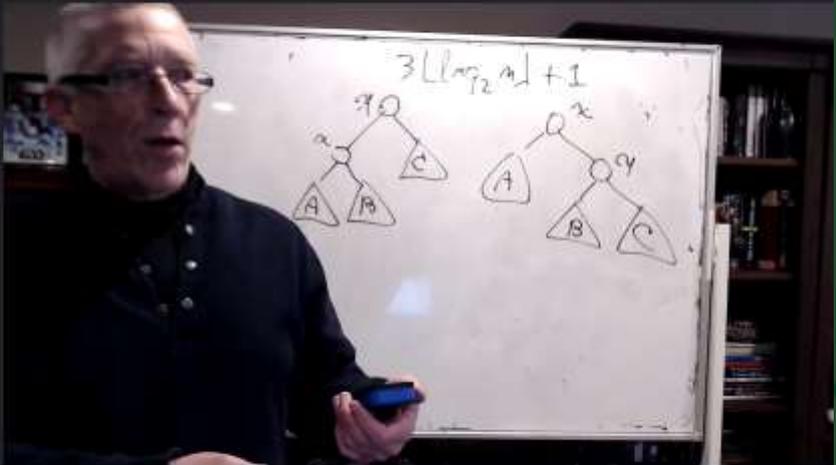
- Finding the **most negative** component c_i of reduced costs \bar{c}_N called **pricing out**.
- Increasing corresponding component x_i of x_N causes z to further **decrease**; x_i becomes **new basic variable**.
- At the same time, decreasing component x_s of x_B (**to 0**), as selected by the **ratio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

13

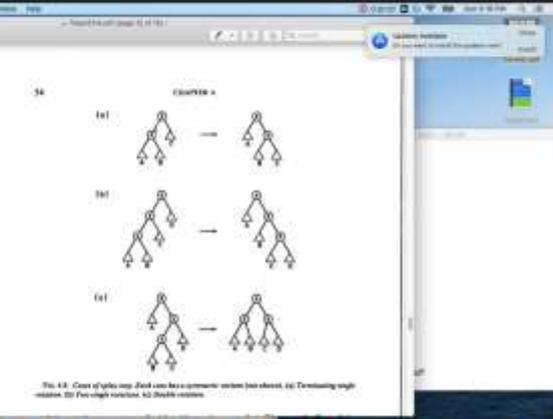


ENGR 510

Rooms Courses Groups Users Imports/Exports



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



51:12 / 1:10:29

Poll 3

I have a better understanding of Echo360 Lecture Capture.



http://help.echo.colostate.edu

Firefox File Edit View History Bookmarks Tools Window Help

Echo360 Help - Colorado State

https://wsnet2.colostate.edu/cwis24/echo/echohelp/Default.aspx

COLORADO STATE UNIVERSITY | ECHO360 HELP

Home Login Requests Echo360 at CSU Echo360.org Documentation

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?

Firefox File Edit View History Bookmarks Tool

Echo360 Help - Colorado State

https://wsnet2.colostate.edu/

COLORADO STATE UNIVERSITY | E

Home Login Requests Echo360 at CSU

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.

- Request Echo360 Recordings
- Cancel a Scheduled Recording
- Request a Special Recording

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