Guidelines for Technologies Enabling Online Delivery

Adapted from My Canvas Teacher Guide prepared by CELT

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by

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Outline

1. How to Record Lecture Videos

1.1. Camtasia for Screen Recording

Cost: $249 (One-time fee. Talk to your department chair to cover the cost)
Download Link: https://www.techsmith.com/store/camtasia

Following is a good tutorial for first time Camtasia users.

https://www.youtube.com/watch?v=aV90jY7avPo

The video has the following information:

0:00-2:21 How to download and install Camtasia
2:21-4:42 How to record your screen. The example here shows recording a webpage, but you can do the same thing with PowerPoint. You can either play your slideshow and record the full screen, or if you want to the see what is coming next you can select just the slide as your screen recording area. Please keep in mind best practices for preparing PowerPoint slides.

4:42-7:52 How to edit the video. You don't need to start all over again if you make a mistake while recording. Editing in Camtasia is easy.

7:52- 8:42 How to export your Camtasia file to an mp4 format. When you save the Camtasia file, it saves it as a Camtasia Project. You will need to export it to be able to upload the Canvas Studio.

8:42-10:40 How to upload to YouTube. I recommend you use the built-in tool "Studio" in Canvas to upload your videos, so you can skip this part.

Things to Keep in Mind

- Do a test run before you record your full lecture to make sure everything is functioning well. **The most common problem is not selecting the right audio input**.
- Keep your **videos short** (No longer than 15 minutes)
- **Don't read** the slides (use images, figures, keywords on the slides, and provide additional information and explanation in your voice overs.)
- Keep Principles of Multimedia Learning (Clark & Mayer, 2011) in mind while designing your slides and videos:
    - *Coherence Principle* – People learn better when extraneous words, pictures and sounds are excluded rather than included.

- *Signaling Principle* – People learn better when cues that highlight the organization of the essential material are added. Have an introductory slide to tell what they will learn, and then at the recap what they have learned.
- *Redundancy Principle* – People learn better from graphics and narration than from graphics, narration and on-screen text.
- *Spatial Contiguity Principle* – People learn better when corresponding words and pictures are presented near rather than far from each other on the page or screen.
- *Temporal Contiguity Principle* – People learn better when corresponding words and pictures are presented simultaneously rather than successively.
- *Segmenting Principle* – People learn better from a multimedia lesson is presented in user-paced segments rather than as a continuous unit. That is why you need to keep your videos short.
- *Pre-training Principle* – People learn better from a multimedia lesson when they know the names and characteristics of the main concepts.
- *Modality Principle* – People learn better from graphics and narrations than from animation and on-screen text.
- *Multimedia Principle* – People learn better from words and pictures than from words alone.
- *Personalization Principle* – People learn better from multimedia lessons when words are in conversational style rather than formal style.
- *Voice Principle* – People learn better when the narration in multimedia lessons is spoken in a friendly human voice rather than a machine voice.
- *Image Principle* – People do not necessarily learn better from a multimedia lesson when the speaker's image is added to the screen.

1.2. Hand-written Problem-Solving Recordings

You can use Camtasia and the same recording techniques for screen writing if you have a tablet computer. Use this just for problem solving demonstrations. If you would like to write definitions, descriptions choose to prepare a ppt presentation. You can also combine slides with problem solving demonstrations in Camtasia editing.

Hand-written Problem Solving with iPads

You can use the built-in screen recording feature in iPads to record your problem solution demonstrations. When you are done recording, the video file is saved in "Photos".

Following is a guideline for how to add the built-in screen recording to the control center

https://www.macrumors.com/how-to/record-iphone-ipad-screen-ios-11/

You can use the notes function as a notepad and run the screen recording to record your voice over. You will need to hold the record button for three seconds to get the microphone settings. You can also create a pdf of the notes page.

1.3. How to Upload Lecture Videos to Canvas

You can use the "Studio" tool embedded in Canvas to display your lecture videos. Studio has the following features:

- Integrated inside of Canvas (access from the global navigation bar)
- Captioning for Accessibility
- Large amount of storage outside of your course storage
- Feedback and Questions within the video
- Analytics
- Responsive design for mobile devices
- Available for all Faculty, Staff and Students at Iowa State University in Global Navigation of Canvas

For instructions on setup and usage, see the following guidelines:

How to use Studio in a course
Record a webcam video in a course (This is for recording through Studio. If you are creating your videos in Camtasia, you don't need this. However, it might be an easy way to record a short announcement, or overview video)
Record a screen capture in a course (You don't need this if you are using Camtasia)
Upload a video into Canvas
How to Caption a video in Studio (This is a good feature especially if you have a student with a need)
Embed my video using Assignments, Discussions and Pages
Create a video quiz within my course
Add comments or replies to Canvas Studio media

1.4 Panopto

To add Panopto to your course

1. Navigate to **Settings** on the left navigation within your course.
2. Under the **Navigation** tab, drag Panopto from the bottom and drop it in the top.
3. Scroll to the bottom of the page and choose **Save**.
4. Panopto will now show in your left course navigation.
5. Once you click on Panopto, you will see an option for **Create**

6. Choose Record a new session and download Panopto if you have not downloaded already, and then **open** Panopto.
7. You can decide whether you want to record yourself, screen, etc. and then click on the red record button.
8. Click on **Webcast** and hit **recording**. It will create a link to share.
9. Once you are done recording, you can name your file and click on **upload**

2. Synchronous Meetings and Virtual Office Hours

2.1 Webex

Iowa State IT has a site license for <u>Webex</u>, which allows any student, faculty, or staff member with an Iowa State Net-ID to download and use the software at no charge. Video conferences can have up to 1000 participants. Participants can join in using desktops, mobile devices, or telephones. Webex meetings can be up to 24 hours long and recordings can be stored online.

Webex is a video collaboration option for Canvas. You can

- Schedule and record online class meetings
- Create spaces for students to chat, meet, whiteboard and share files.
- Setup a schedule of virtual office hours on to allow students to meet with you over a Webex meeting.

To add Webex to your course

1. Navigate to **Settings** on the left navigation within your course.
2. Under the **Navigation** tab, drag Webex from the bottom and drop it in the top.
3. Scroll to the bottom of the page and choose **Save**.
4. Webex will now show in your left course navigation.

For instructions on setup and usage, see the following guidelines:

[Webex Education Connector Setup](#)
[Classroom Collaboration](#)
[Virtual Meetings](#)
[Office Hours](#)

2.2. Zoom Video Conferencing

Iowa State IT has a site license for <u>Zoom</u>, which allows anyone with an Iowa State Net-ID to download and use the software at no charge. Video conferences can have up to 300 participants. Participants can join in using desktops, mobile devices, or telephones. Basic accounts are limited to 40-minute sessions.

Following are guidelines for setting up a zoom meeting

https://www.elo.iastate.edu/design-and-delivery/zoom-video-conferencing/

2.3. Canvas Conferencing Tool

Conferences seamlessly integrates with Canvas, enabling quick setup of virtual office hours and online classroom meetings. If you create groups for students, they can also create conferences and have virtual meetings.

To add Conferences to your course

1. Navigate to **Settings** on the left navigation within your course.
2. Under the **Navigation** tab, drag Conferences from the bottom and drop it in the top.
3. Scroll to the bottom of the page and choose **Save**.
4. Conferences will now show in your left course navigation.

Following are guidelines for setting up Conference:
Create a conference in a Canvas course
Use the Conferences interface as a Moderator or Presenter
Use Breakout rooms

2.4. Panopto

You can manage, live stream, record, and share videos via Panopto

To add Panopto to your course

10. Navigate to **Settings** on the left navigation within your course.
11. Under the **Navigation** tab, drag Panopto from the bottom and drop it in the top.
12. Scroll to the bottom of the page and choose **Save**.
13. Panopto will now show in your left course navigation.
14. Once you click on Panopto, you will see an option for **Create**
15. Choose Record a new session and download Panopto if you have not downloaded already, and then **open** Panopto.
16. You can decide whether you want to record yourself, screen, etc. and then click on the red record button.
17. Click on **Webcast** and hit **recording**. It will create a link to share.
18. Once you are done recording, you can name your file and click on **upload**

3. Online Tests and Exams

3.1 How to Create a Quiz in Canvas
https://community.canvaslms.com/docs/DOC-12943-4152724267

3.2 How to Randomize Questions
https://community.canvaslms.com/docs/DOC-12979-415298624

3.3 How to Create a Numerical Answer Quiz
https://community.canvaslms.com/docs/DOC-12706-415243382

3.4. How to Create a Quiz from a Test Bank
https://community.canvaslms.com/docs/DOC-12979-415298624

3.5 How to Avoid Cheating - LockDown Browser

LockDown Browser is a custom browser that locks down the testing environment within Canvas. When students use Lockdown Browser they are unable to print, copy, go to another URL, or access other applications. When an assessment is started, students are locked into it until they submit it for grading. (Supports Windows and Mac OS)

- Assessments are displayed full-screen and cannot be minimized
- Prevents other applications from being active
- Copy, paste, and print screen functions are disabled
- Supports screen readers

Following are guidelines for setting up the Respondus LockDown Browser. You will need to provide detailed guidelines to students as they will need to install the LDB to their computers.

- Instructor QuickStart Guide for Respondus LockDown Browser
- Student QuickStart Guide for Respondus LockDown Browser
- Download Lockdown Browser
- Lab and IT administrator support

4. Online Discussions

Discussions can be created to facilitate engagement and interaction. Discussions can be graded or ungraded and assigned to the whole class or individual groups. You can also assign students to be the discussion leaders, you, as the instructor, still need to monitor and respond as needed.

Following are guidelines about Discussions:

- What are Discussions?
- How do I use the Discussions page?
- How do I create a discussion as an instructor?
- Additional information can be found in the Instructor Guide to Discussions

5. Accessibility

Record all online sessions: Regardless of which of tools you use, your sessions should be recorded so they can later be captioned for students. This applies to all classes, as instructors may not know whether students will need this accommodation and Student Accessibility Services may reach out for copies of your lecture to create transcripts and/or captions for enrolled students.

Questions about student accommodations? If you are wondering how to best accommodate students contact the Student Accessibility Services staff at 515-294-7220 or email accessibility@iastate.edu.

6. Remote Access to Computer Labs

Most of the applications available in the engineering computer labs are also available remotely

For instructions on how to connect to VDI from a PC, click here

For instructions on how to connect to VDI from a Mac, click here

7. Additional Resources

CELT has also prepared resources for Course Continuity in an Emergency that might have additional information.