Table of Contents

General Guidelines

- Don't panic or despair. We're an amazing team of skilled people and we will rise to this very strange occasion.

- Keep it simple. This doesn't have to be the best experience the students have ever had with their learning; we will just do as well as we can at helping them meet course learning outcomes under the unusual circumstances.

- Be flexible! ISU is of course not the only university in this situation, and not only are things changing at a fast pace, but many of the country's universities are trying to access the very same set of software and cloud-based services. Locally, educational technology resources may be pretty overwhelmed by requests and needs.

- Recognize that students will be accessing material from all over, with a wide range of internet quality and computing resources. Where you have options, consider how to deliver with low bandwidth.

- If your course does not *need* synchronous video and interaction then don't do it, in order to spread out the demand.

- At this time, hourly graders and other student workers can still be used. For lab TAs use their hours to help you transition to online.

- Communicate clearly to your students *how* you are handling the shift and *where* they can access material. Do this before the start of classes on March 23. If there are resources that the students need to take with them as they leave campus, let them know right now.

- Let Amy know if you need resources (webcam, mic, whatever). Alan has secured webcams for installation in several of our main classrooms for the purpose of capturing lectures delivered there, and more information on that will be forthcoming.

Options for Lectures

Easy

- Find existing resources (videos, readings) and post them in Canvas.

- In lieu of in-class exercises or conversation, think about utilizing the chat and discussion tools in Canvas.

Medium

- If you have PowerPoint slides already developed, and you have a computer mic, you can add narration to the ppt, then upload the file to canvas.

- In lieu of in-class exercises or conversation, think about utilizing the chat and discussion tools in Canvas.

Advanced Medium

There are a number of well-designed packages and tools to help you capture lecture material in video format. What you might chose depends on your circumstances, and whether you want to have live lecture that students can join in real time, or only an archived video for asynchronous watching.

Live lecture

- If your class has < 100 students, use Zoom to host and broadcast a "meeting" for each of your class lectures, which you can deliver in real time with student participation *and* record for later upload to Canvas. Recorded streams include audio, video (optional), screen-capture, application window, and/or even a second camera. Zoom is relatively easy to learn and use. If you don't already have an Zoom Pro account through ISU you'll be limited to 40 minutes per "meeting."

  - Getting it: https://iastate.zoom.us/

  - Local experts: Michelle Soupir, Raj Raman, Amy Kaleita, Tim Shepherd.

- WebEx has a plug-in for Canvas that will allow you to create a "meeting" and allow students to join, as well as have a recorded version posted in Canvas. You can include audio, webcam, and software screen streams. Students do not have to download and install all the things in order to just participate in the WebEx.

  - Getting it: Add this to your Canvas course by going to Settings >> Navigation>> and moving WebEx from the bottom block to the top block (available to students). You as the host will have to download and install files in order to launch WebEx.

  - We are unaware of an ABE Local expert – if you are one, let us know!

- Canvas also has a built-in "conference" function that allows you to stream audio, video, screen-capture, and/or its built-in whiteboard. Iowa State's version does not keep recordings for more than 14 days. It is fully browser-based and does not require any special downloads to a student's device. Runs on most desktop, Chromebook, iOS, and Android browsers.

    o Getting it: Add this to your Canvas course by going to Settings >> Navigation>> and moving Conference from the bottom block to the top block (available to students).

    o Local expert: Amy Kaleita (not an expert! But has used it).

Asynchronous lecture (non-streaming, no joining in real-time)

- Camtasia. This is a commercial software package that has been around for a long time.

    o Getting it: the company just announced they are offering [free access and expanded usage](#) of tools to the education community through June 30, 2020.

    o Local expert: Steve Freeman

- Panopto. This is the lecture capture system Iowa State has been using for many years. It runs from your desktop and will capture webcam, a specific window, or your whole screen. After you upload it to the Panopto server, your video can be shared via a link (in Canvas, Add >> External URL).

    o Getting it: https://iastate.hosted.panopto.com

    o Local experts: Raj Raman, Amy Kaleita, Tom Brumm.

- Canvas Studio. This is another built-in option for capturing your computer screen and/or webcam along with audio. Students can comment and it logs comments with timestamp and bookmark to that moment of the video. You can look at watch stats if you want to. It has a tool that will use automated tech to produce captions (they are about 85% accurate – may need some editing. Or just let the students enjoy whatever goofs it comes up with!). It integrates pretty seamlessly into Canvas modules – record a video, add it to modules by using Add >> External Tool >> Studio >> select the video.

    o Getting it: Add this to your Canvas course by going to Settings >> Navigation>> and moving Studio from the bottom block to the top block (available to students).

    o Local expert: Amy Kaleita (not an expert! But tested it out).

- ISU-supported recording services through ELO, the Brenton Center, etc. The university is reviewing availability of, and possibly rolling out more, classroom recording studios for people to reserve space where a person could be recorded, with some other person there managing the recording. However, to the extent that we can avoid taxing university resources by managing things ourselves, if you can relatively easily manage doing things at your own desk, do so.

Options for Facilitating Group Work

- Students can use Zoom themselves – the free version allows for unlimited 1:1 meetings. For group meetings, up to 100 participants can meet for up to 40 minutes.

- Students can also use Google Hangouts.

- You can set up scheduled WebEx or Canvas-conferences. Both support use of "breakout rooms" for student teaming.

Options for Labs

- For labs where the students are using equipment to generate data, consider recording a video that explains how the data are generated, and then providing prior or synthetic data to the students to complete the rest of the lab.

- Because it's possible that the cancellation will not last the whole rest of the semester, consider reorganizing your labs to put the most hands-on activities at the end of the term.

- As you strategize, identify what are the key learning outcomes from your lab activities (especially as they relate to the key learning outcomes for the whole course). There may be alternative ways to meet enough of those learning outcomes without the students having to come to the lab to do the activity. Imperfect and less than ideal may be good enough under the circumstances.

Student Computing Resources

- Students with their own computers should be encouraged to use remote desktop to log in to the lab computers if their coursework requires particular software that is on our machines but maybe not theirs.

  - Instructions on using Remote Desktop: https://it.engineering.iastate.edu/remote-computing/

  - To use remote desktop from off of the ISU internet, they will need to enable VPN (virtual private network). Instructions for setting up vpn: https://it.engineering.iastate.edu/how-to/install-and-connect-to-vpn-pc/

- Students in Iowa can access computing resources at ISU Extension and Outreach offices, which are located in every county and have high-speed internet.

- ABE has a limited number of laptops which could be signed out to students with no better option. University IT and the Library are also involved in making things available. Department advisors are the primary point of contact for students to self-identify that they need assistance on this. If you hear from a student that they have an issue, direct them to the advisors to get on the list.