**Practices for online teaching in Spring 2020**

# **Important points**

1. Any technological method can fail, so
	1. Verify anything like an online exam by doing a dry run with something that doesn't matter at all - i.e., a single trivial question and a minimal number of completion points for submitting.
	2. Build in redundancy to the extent possible - e.g., have your notes scanned and uploaded as described below to augment your lectures.
2. It is not sufficient to have an unrecorded live stream of your class or to schedule exams or interactions with you at a single time.
	1. You need to provide students a way of accessing recordings if you stream.
	2. You need to provide a window of time for exams or other assignments.
	3. You need to provide asynchronous ways of interacting - e.g., an online forum.

Default and other possible practices are described below. All of this is subject to change as conditions and directives change. Health and safety are the primary concerns, but within that context, serving our students well under these difficult circumstances is essential.

Purdue’s page on teaching remotely is at

<https://www.purdue.edu/innovativelearning/teaching-remotely/>

There is a page about the use of various tools at

<https://www.purdue.edu/innovativelearning/teaching-remotely/tools.aspx>

You can email for help at innovativelearningteam@purdue.edu

Other approaches in the Math Department are at

<https://docs.google.com/document/d/1Ljo48FwwMuRqKfAjFLlG-T4X-WshMzVa2ILJCIoivQM/edit?usp=sharing>

# **Default practice (as of March 24, 2020)**

## Lectures:

Most people are not using Boilercast, but many are still using Kaltura capture, described on the alternatives page:

<https://docs.google.com/document/d/1Ljo48FwwMuRqKfAjFLlG-T4X-WshMzVa2ILJCIoivQM/edit?usp=sharing>

For those using pre-scheduled Boilercast in your usual classroom, the video will be automatically uploaded and made available to the students in your class. The video is not available in real time, and there is no capability for interaction with the students as you write. It is important to keep your notes organized and scanned since some students won't be able to access the videos easily (or the recording process could fail).

1. Go to your regular classroom at the regular time (as if nothing has changed).
2. Turn on the doc cam if it's not on, turn on the projector, and select the doc cam for the projector.
3. Login to the classroom computer using your Career account (no Boilerkey). Press ctrl-alt-delete all at once to get the login prompt.
4. **Optional (exercise caution)**: You may open the Kaltura Classroom application on the computer to monitor the status of the capture - it’s the green square shown second from left in the image below. This toolbar is at the bottom right of the screen. The green square is often the last to load upon logging in.


Opening the app will allow you to see what is being captured, and time details. **Do NOT click on the big red button to “Start Recording.”** Doing so will initiate a separate ad hoc recording that will NOT be automatically processed into Blackboard. Instead, wait for the pre-scheduled recording to initiate on its own.

1. Give your lecture by writing on paper in the view of the doc cam and speaking normally (you can't use the chalkboard or whiteboard or anything else). The projector and computer application let you see what the students will see.
2. You may log off before the scheduled end time, **but the capture won’t be processed until someone logs into the computer.** You can force an early capture by logging off, then logging back in again.
3. Leave the room when you are done. Set the projector to ‘Blank’ when you are done but don’t turn the projector entirely off.
4. Turn in your notes to be scanned and uploaded for students to view (we'll try to work on getting staff or students to do this).
5. You may call 49-42765 for help.

According to the provost's office, students are not allowed to be in the room while you're recording.

Phil will be scheduling the recording to happen automatically, so you don't need to do anything beyond the above. If you are teaching multiple sections of the same course, he will schedule your first section to be recorded and distributed to the students in all of your sections.

If you want to use another method or make changes from this default, please email Phil.

You can see videos from a prerecorded session by logging into Blackboard (<https://mycourses.purdue.edu/webapps/portal/execute/tabs/tabAction?tab_tab_group_id=_17_1>) and clicking on the BoilerCast link on the left hand side.

## Blackboard and associated tools:

For information about Blackboard (as well as a link to login to Blackboard) and many other online tools, go to

<https://www.purdue.edu/innovativelearning/supporting-instruction/instructional-technology/blackboard.aspx>

Log in to Blackboard Learn using the link found near the top of this page.

Unless you’ve opted out of Blackboard, each of your classes has a Blackboard page. If you haven’t used Blackboard for a class yet, above, read and follow the directions under “Note on Course Availability” to make the information on Blackboard available to your students, or see <https://www.youtube.com/watch?v=YlwZos6O6oM&feature=youtu.be>

Your Blackboard class page has a link to BoilerCast, but it might be hidden to the students. To make it visible: click on the to its right and select “Show Link”:



The pre-scheduled classroom BoilerCast captures will record both the computer screen and the document camera. Click on the icons in the upper right of the video feed to toggle between sources, and to hide/show the second source. 

## Office hours and interaction via Piazza:

It's important to have asynchronous interaction formats. The default possibility is a Piazza forum, which allows students to type questions and to provide responses from the faculty member and other students.

You can set Piazza up for your class from Blackboard. Go to the “Tools” menu item just below “Course Content” and choose “Piazza.” Fill in the name with something like “Discussion board” and fill in a description if you like - e.g., goals for the discussion board and whether the instructor or TA will be answering questions there. Hit ‘Submit’ and follow instructions about giving access to students or other instructors. There are instructions with pictures here:

<https://www.cs.purdue.edu/teaching-remotely/piazza.html>

WebEx with a webcam is a possible way to hold interactive office hours - students can join at a time you specify and you can interact with multiple students at once. Purdue has a contract with WebEx, so you all have an account with them - go to purdue.webex.com.

Zoom is a similar service that some people find to be more stable and user-friendly. If you sign up for a free account with Zoom using your Purdue email address, you can host meetings with up to 100 people. In normal times, there is a 40 minute time limit, but they've removed that restriction for education purposes for now.

## Exams, homework, quizzes:

At this time, there is essentially no practical way to proctor an exam. There are some online proctoring services, but they are not going to scale to the size that we need.

The larger coordinated classes have the possibility of online exams through Pearson MyLab or LON CAPA, but smaller classes will probably have to distribute and collect exams, quizzes, and homework via Blackboard or something similar.

Gradescope is a tool that can make grading submitted assignments easier. It’s also available through Blackboard through the “Tools” menu under “More Tools” at the bottom. There is some documentation here: <https://www.gradescope.com/get_started> and here: <https://www.gradescope.com/help> The CS department has a guide here:

<https://www.cs.purdue.edu/teaching-remotely/gradescope.html>

As noted above, it is generally not sufficient to schedule an exam for one particular time. Students will be living in many different time zones, potentially throughout the world, and may have conflicts with other exams. So it will be important to provide some flexibility in scheduling.

# Alternative practices:

See this document: <https://docs.google.com/document/d/1Ljo48FwwMuRqKfAjFLlG-T4X-WshMzVa2ILJCIoivQM/edit?usp=sharing>