This document is to help with teaching small to medium sized lectures and recitations remotely. Additional information may be available at https://cos.gatech.edu/continuity
Large lectures (over 100 students) will require a different approach (see additional notes below)

For assistance with using remote access and online teaching technology, you have several ways to help:
- Reach out to your local IT support
- Email support@cos.gatech.edu
- Contact the Enterprise Help Desk which has extended hours. Phone: 404-385-5555 Chat: https://techsupport.gatech.edu/

Definitions:
- Canvas is the name of the campus Learning Management System (LMS).
- BlueJeans is a campus-supported teleconferencing app.

Section 1, below, describes how to set up a set of streaming lectures (e.g., MWF at 11:15-12:05) and office hours (e.g., W at 1:00-2:30) for the remainder of the semester.

Section 2 describes how to stream a presentation from your computer screen. However, unless you have a stylus device, it is difficult to write or draw on your presentation.

For instructors who would normally use a whiteboard/blackboard, the use of your phone’s camera as a document camera is probably the best choice. This is described in Section 3 and more detailed instructions are forthcoming, but you should first work through Sections 1 and 2 to establish and test a basic setup.

1. GETTING STARTED: SETTING UP A LECTURE SERIES AND BEGINNING A LECTURE

Login to the Canvas at https://gatech.instructure.com.

This will require your usual campus username and password.
<table>
<thead>
<tr>
<th>Click the <strong>Courses</strong> icon in the menu on the left.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Select the course name.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Click the BlueJeans entry from the list of course tools.</th>
</tr>
</thead>
</table>
NOTE 1: If you have not used BlueJeans in Canvas before you will need to click on the Authenticate button.

NOTE 2: If the BlueJeans entry is not visible you will need to select the Settings entry at the bottom of the list of course tools, and then choose the Navigation tab at the top. From there you can drag the BlueJeans item from the group of hidden items to visible items.
Click the **Schedule** button to create a new recurring lecture or a recurring office hour.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Start time</th>
<th>End time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corona lecture</td>
<td>Weekly lecture</td>
<td>03/10/2020 01:55 PM</td>
<td>03/10/2020 02:25 PM</td>
</tr>
</tbody>
</table>

Recurs weekly on Tuesday and Thursday every 1 week from Mar 10, 2020 to Apr 30, 2020 at 1:55 PM - 2:25 PM

Fill out the information for the lecture series

**Enter a title**

**Provide a description (you must enter some text here)**

Enter the date of your first streaming lecture and set a start time 10 minutes before the scheduled start of the class. This allows students to enter the lecture ahead of you.

Set an end time 10 minutes after the scheduled end of the class. This allows you to go a little late. However, remember that students need to attend other lectures on the regular class schedule.

**Select the next four boxes.**

**When you select the “Recurring meeting” additional options will appear.**

Select **“Weekly” in the Repeat pulldown menu.**

Enter the days when your class meets
Enter the end date (e.g., last date of the semester).

Select Invite “All Course Members”

Click on “Save”

This will create a record of the lecture series in the course site in Canvas.

Go ahead and set up your **office hours** using the same procedure:

In Canvas, click on courses, select your course, select
2. LECTURING FROM YOUR COMPUTER USING BLUEJEANS IN CANVAS

This section describes how to display a file (e.g., Powerpoint, Word, or Adobe) as you lecture. If you have a touchscreen and stylus, you can write or draw on the presentation as you lecture. However, without such a device, it is difficult to add annotations, equations or drawings unless these are already in your presentation - you will be limited to using the cursor to point to elements in the presentation.

To write or to draw equations, schemes and chemical structures, it is probably better to write on a blank page or on a copy of your presentation and to stream your lecture using a document camera (i.e., your phone camera) – see Section 3.

Go to your list of meetings, that consists of lectures and office hours.

At the assigned class time, click on the “Join” button. You can start the meeting 10 minutes before the class time. However, you should delay beginning the lesson until the time that appears in the GT schedule of classes.

When you Join the meeting (lecture or office hour), the BlueJeans site will launch.

If you have already installed the BlueJeans app click in “Launch the app”

If you do not have the BlueJeans app, click on

BlueJeans, Click on “Schedule”, fill in the form, click on “Save”
“join with browser” at the bottom of the page.

Once you are in the meeting you can place the mouse near the top of the BlueJeans window to see several controls.

|These controls |
|---|---|
|1. your camera (so that students can see you, or mute it so they cannot see you); |
|2. your microphone – **unmute your microphone!** |
|3. screensharing, to show students your computer screen, and |
|4. hang up. |

You probably want to show a PowerPoint file or an Adobe File. Open the file on your computer.

In BlueJeans, click on the screensharing icon, select the file you want to share.

Your students will see this file. You can navigate through the file. Use the cursor to point to elements in the presentation. If you have a stylus device, you can write or draw on the presentation as you lecture.

Some hints on lecturing using BlueJeans:

- If you are streaming video of yourself, avoid a busy background (e.g. moving ceiling fans) to save on video bandwidth.
• Speak slowly and avoid speaking during slide transitions. This will help manage bandwidth utilization and minimize network congestion.
• PC microphones are very sensitive and pick up background noise. Encourage everyone to mute their audio microphone when they join. If you click on the People Icon you can mute everyone in the meeting to improve audio during lectures. Make sure you unmute if you want students to be able to speak.
• Remind students to mute their microphones unless they are speaking to the class.
• Encourage students to submit questions using the Chat window for all to see. Make sure you check it periodically and respond to questions.

When your class is done, click on the red button at the top to hangup the call. The recording of your meeting will be processed offline and will appear in your Canvas BlueJeans dashboard when it is ready. This can take several hours. Students can access the video from the Canvas site as soon as it is posted.

3. USING YOUR CELL PHONE AS A DOCUMENT CAMERA

This section describes how to use your cell phone as a document camera which will allow you to write and draw on paper and have all the students see your lecture notes.

The prerequisites are a laptop computer and a smartphone, both with the BlueJeans app installed. The lecture will use your cell phone camera and microphone to stream directly to students via the BlueJeans app. No storage or transfer of video files are needed.

On your computer, go to your list of meetings, and join the meeting at an appropriate time.

Mute the laptop microphone and camera via the BlueJeans app and make sure your laptop speaker is also muted.

Join the same BlueJeans meeting on your phone.

There are two common ways to do this.

First note, when you created the meeting as above, you were sent an email with the title of the meeting and a subject line that said (DO NOT FORWARD THIS INVITE).
**Method 1: Email**
Click on the Join Meeting button in that email, from your phone.

**Method 2: Meeting ID**
Note the 9 digit Meeting ID and 4 digit Moderator Passcode from the email.

Open the BlueJeans app on your phone and join the meeting by meeting ID as shown in this series of screenshots.

Note you should select use App Audio and Video and make sure the microphone and video are turned on.

Then click on Join Meeting

---

Mount your phone about 18” above a hard copy of your lecture presentation or a piece of paper.

There are several options for how to do this:

See photo on right for a simple way to mount your phone using only a stack
of heavy books and a pair of chopsticks or pencils. This is the fast, cheap, easy option.

You can also 3D print one from https://www.thingiverse.com/thing:4144809

Or purchase a tripod or other phone mounting device. Search Google for “Smartphone Overhead Tripods”

On your laptop in the BlueJeans app, select the People icon which will appear if you move your mouse to the upper right area of the window.

In the people view, expand the options for the participant corresponding to your phone (which will be a second participant with your name) and select the option to pin the phone as the presenter.

This will prevent the focus from leaving the paper when some other participant speaks.

ADDITIONAL NOTES and forthcoming instructions

1. Current licensing limits the use of Basic BlueJeans for large lectures. More detailed instructions will be coming soon for this use case. The solution will likely involve http://webex.gatech.edu/ or BlueJeans Events http://gatech.bluejeans.com (click Events).
2. **Kaltura** is a Campus provided video management tool that can be used to host media. It plugs into Canvas via the My Media tool. One useful feature of this tool is it’s ability to add ADA-compliant closed captions to videos, which will be needed when created recordings for use in instruction.