

All ideas/options below make use of Zoom in some capacity. See link below for help with learning Zoom.

<https://wp.math.ncsu.edu/it/zoom-virtual-meetings/>

For classes where the department has online videos:

- Instructor should let the students know which videos to start with and an approximate pacing of what to watch and when.
- Actual class times and recitation times could become office hours via zoom. Students and instructor can write solutions on paper and hold up to webcam for others to see.
- Use moodle forums to share work and ask questions, students can upload a picture or scan for others to see
- Bevin Maultsby has a list of all classes which have online recordings--please contact your course coordinator and/or her if you need access.

For classes where there are no videos yet:

**Strongly recommended:** Preparing lectures ahead

- Online resources might already exist on YouTube, Khan Academy, or something like MIT OpenCourseware (<https://ocw.mit.edu/courses/mathematics/>). Don't be afraid of referring students to videos you've selected as appropriate.
- Recording videos
  - on campus with a doc cam in an empty classroom is easy, see <https://classtech.oit.ncsu.edu/classtech-home/mediasite-record-now/>
  - At home/in office with slides and narration via zoom
  - At home/in office with live writing via an iPad and zoom (To request temporary use of an iPad, see <https://wp.math.ncsu.edu/it/inventory-management/>.)
    - Here is a video Bevin made streaming her iPad to Zoom and creating a recording: <https://youtu.be/bYqnlpPFbXM>
- Videos can be short, they need not be a full 50 minute or 75 minute class lecture video
  - Introduce a new idea or doing a problem or proof in one video
  - Then point students toward a problem to practice, maybe also post a written solution to the problem or make it part of written HW
  - Next another example/problem/proof video, then another question, etc.
  - Lets the students feel like they're making progress working through things step by step.
  - Tries to replicate an interactive lecture where students work on problems/talk with each other in between short bits of lecture.
- Actual class times and recitation times could become office hours via zoom. Students and instructor can write solutions on paper and hold up to webcam for others to see.
- Use moodle forums to share work and ask questions, students can upload a picture or scan for others to see

Holding live lectures during class time (this may not be ideal, connections issues, technical issues, etc.)

- If you have an iPad or other tablet device with a stylus, you could still hold regular class meetings via zoom.
- You can share the screen of your tablet with the class so they would see your writing and hear you.
- Students can also interact, asking and answering questions.
- You can hold a zoom session alone, so log in at [ncsu.zoom.us](https://ncsu.zoom.us) and try it out prior to using it in class.