# Connectivity Challenges

As we continue to adjust to working and learning in new ways, we still face some challenges with our ability to connect to things over the internet like our Zoom classes or meetings.

Within a single household, there may now be multiple family members attempting to use Google Classroom, Zoom into a web conference, and stream a movie - all at the same time. As students return to the dormitories on campus, there will be more people in one building connecting to the classes that are being held over Zoom, while some head to the classrooms for in-person sessions.

We include here a few strategies for helping yourself and those around you.

What can you do to help yourself?

- A wired connection is more reliable than a wireless one. Try using a network or ethernet cable (pictured below) to plug in - to a router if you are home and have that option, or to the network jack in your room if you are on campus. Check your computer; you may require an adapter to allow you to plug in an ethernet cable. Your manufacturer's website is the best place to verify this.
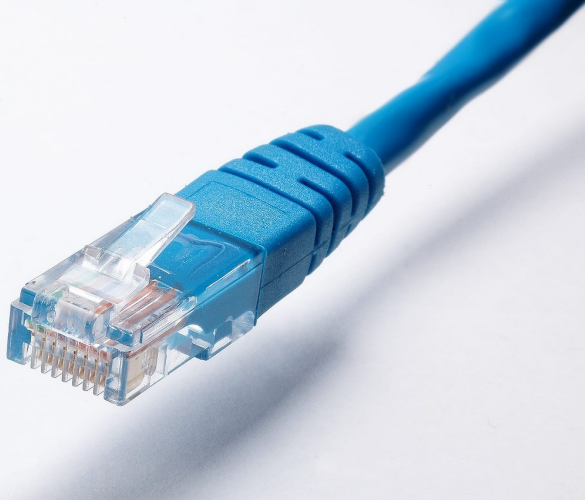
- If connecting to Zoom while attending the in-person section of a hybrid class, make sure you're muted.
- For fuzzy Zoom connections, many have found that turning off their video has enabled them to hear and be heard better.

    - Another tip is to minimize your browser windows (all of them!) if you are told that your system resources are limited.
- You can turn off the wireless on your phone during class or meetings, to reduce the number of devices demanding internet connections at the same time.
- We recommend a headset, with microphone, that you find comfortable to wear and easy to use. Bluetooth headsets may not meet that last requirement; although they do not have the wires, you may also suffer connectivity issues with your computer.

What can you do to help others?

- Stay off streaming services, such as Netflix, during class hours or when someone else in your house has a meeting, even if you have a break. Streaming services place high demand on the network capacity of individual buildings and (for those in the dorms) our campus Internet bandwidth.
- Please keep an eye on email updates and the Drew COVID website for further information about any locations on campus that might be available for studying or attending remote classes, and the safety guidelines or reservation requirements that may be in place for those spaces.

What if you have trouble?

If you do experience trouble connecting to the wireless wherever you are, please try the following basic troubleshooting steps:

1. Turn off your computer. Completely shut it down. Restart.
2. Turn off the wireless on as many nearby devices as possible.
3. Plug your computer into the network using a network or ethernet cable. See picture above.

If these steps do not correct the problem and you are living on campus, please email helpdesk@drew.edu with the following information:

- Type of device(s) experiencing the problem, including the operating system(s). For example if it's a phone we need to know if it's Android, Apple, Windows phone, or other. What version of the operating system you are using is helpful but not necessary.
- MAC address of any device having the problem. (Instructions for collecting this depend on your device. If a Google search for MAC address and the type of device you are using does not tell you how to collect this information, please let us know)
- Exact location where the problem occurred (could be a single room number, or multiple locations)
- Network(s) you are having problems with; e.g., drew, drew1x, or both
- A phone number where you can be reached

If these steps do not correct the problem and you are living off campus, here are some suggestions:

1. There may be nothing you can do. Internet providers are dealing with far more simultaneous traffic than they used to deal with, and they are doing their best to manage these demands. You may simply need to be patient and creative!
2. Consider moving things around - yourself, your router - and running speed tests (such as the one at https://www.speedtest.net/) to see what placement works best.
   a. You might read about boosting, extending or repeating your wireless network. Keep in mind that your wireless network is a bit like a rubber band in this situation: the extender from your service provider can stretch the signal further, but stretching a rubber band thins it out - just as extending the signal does not actually make it any faster.
3. Wired is always better than wireless. If you have the option, plug in an ethernet cable (some routers give you a spot to plug in; some do not).
4. If you have multiple people working/learning from home, you may need to cut down on the extraneous stuff. If you're having performance problems, try halting things like Netflix just to eliminate a local problem.
5. The closer you are to the access point (your router), the better.
   a. Both MacOS and Windows use the "number of curved lines" method for showing WiFi strength, but it's really a rough guide. More is better, position yourself to have more than one or two bars.

6. Have a backup plan.
   a. If you can, communicate your back up plan with those who will need to know - ahead of time.

If these basic strategies do not work, reach out to your local service provider sooner rather than later.

You can find additional suggestions and information from many news sources. Here are a few articles:

- Internet Connection Troubleshooting Tips from How-To-Geek
- How to get a better wireless signal article from How-To Geek (published in 2017, and still relevant!)
- A NY Times Article (remember, Drewids can get free access through the Library)
- An NBC News Article with additional tips
- A cheeky article from Review Geek
- Optimum Hot Spot Map
- Xfinity Hot Spot Map