

Connection and Equipment Expectations for Students and Tutors in Online Classes

The expectations and recommendations below are meant to ensure that students and tutors in virtual classroom environments can engage in the core aspects of our work at the college: conversation and demonstration. While these standards apply most obviously to our low-residency Graduate students, Undergraduate and in-person Graduate students need to make sure they can meet these standards now, as their classes might need to pivot online due to elevated cases of Covid.

Most crucial to accomplishing that task is a fast and reliable internet connection, but the hardware and software you use will also structure how—and to what degree—you are able to join the conversation and to demonstrate your thinking to your classmates.

All of us sustain our minds and hearts around the table at St. John's College. The following technical recommendations are meant to help us to do so when that table is a virtual one.

Please note that you can purchase all new equipment that will be sufficient for participation for around \$500. Please see the EQUIPMENT section below for more specific equipment cost estimates.

INTERNET CONNECTION

To participate in remote classes, it is crucially important that you have a smooth and stable audio/video connection. You cannot be a contributing member of online classes at SJC without being seen and heard. This is controlled most particularly by your **upload** connection speed and not your download speed. Your internet connection should be robust enough to allow for reliable and clear audio and video, not just for you, but for your classmates. Just because you can hear and see everyone does not mean they can hear and see you. It is helpful, as soon as possible, to test your connection with a group to see if the computer and connection you intend to use for remote classes are functioning properly.

If your internet connection does not allow you to reliably send and receive clear audio and video, the recommendations below may help you determine how to improve your ability to participate in virtual classes. However, they may not in all cases be sufficient to accomplish this goal. You may also need to adjust your individual hardware/software situation.

If you are signing up for new internet service, you should be aware that upload/download speeds quoted by internet providers are not reliably what you will actually experience.

If you already have internet service, you should test your actual download and upload speeds rather than relying on the connection speeds published by your provider; you may do so at [speedtest.net](https://www.speedtest.net). You should test your connection speeds at various points during the

day to get a sense of what speeds you might get during your classes. You may also wish to compare wifi speeds to ethernet speeds and consider using a wired connection for classes.

Recommended: 50 mbps download and 5 mbps upload

In most markets in the United States, the only internet carriers that offer such speed are cable companies or fiber optic providers. DSL providers usually are not able to provide such speeds.

Adequate: 25 mbps download and 3 mbps upload NOT Adequate: Cell phone connections

Cellular data speeds are not “high speed” and are not sufficient for classes this upcoming academic year.

PLEASE NOTE: Required minimum connection speeds published by platforms like Zoom and Teams are significantly lower than what is recommended here, but experience has shown that these are not sufficient for full participation.

EQUIPMENT

For conversation we expect a PC or laptop for Zoom (or Teams) video conferencing. Your computer screen should be large enough that you can see each member of the Zoom discussion, even when they are not speaking, so that you can pick up on nonverbal conversational cues that can be missed when all participants are not displayed. Your device and operating system should be capable of downloading the most recent Zoom app and not merely accessing it through your web browser.

For online classes that require demonstration and other in-class writing and drawing, we recommend a tablet with a touchscreen and stylus. If you do not have a separate touchscreen device you will need either to split the screen or toggle between the faces of your classmates and whatever program or application you may be using for board work. If your computer, like most, does

not have a touchscreen, it will also mean drawing or writing either with a trackpad or a mouse. Some tutorials may use other methods—such as webcams or even cellphones trained on paper—for board work. However, a tablet supplement will still be ideal: it will allow you to dedicate your primary screen (your PC or laptop) to video conferencing, so that you can see your classmates’ faces while simultaneously looking at or working on a virtual board on your tablet’s screen.

Expected: Recent Generation Windows PC or Mac

The primary criteria for determining what computer to use is that it is a machine capable of downloading and running the current version of the Zoom app and Office 365 apps, including Teams.

1. Any computer running, or able to run, a current operating system (Windows 11 or at least Mac OS 12.0.1) should be adequate to download and run these essential apps.
2. To find out what operating system you are running on a Mac, click the Apple icon in the upper left corner of your screen and click “About This Mac.”
3. To find out what operating system you are running on a Windows machine, type “info” into the search bar next to the Windows icon in the lower left and select “System Information.”

If you are purchasing a new machine, here are some helpful hardware recommendations from IT. However, many machines that do not meet these standards are still capable of meeting our primary goal that your computer be capable of running the Zoom and Office 365 apps and of sustaining a reliable internet connection so that you can attend class.

1. 2 GHz i5 processor or faster
2. 8 GB RAM or greater
3. 128 GB system storage or larger, preferably solid-state drive
4. USB 3.0 port or adaptor

You can purchase a basic machine (such as an HP laptop or other simple PC) for under \$500.

Suggested Supplements: Touchscreen and Stylus

For tutorials held entirely online or shifting online for an extended period, the following are recommendations; however, your tutor will set expectations for individual classes and you should consult with them before making any purchases of the following items.

Tablet with sizeable touchscreen

1. A tablet can serve as a second screen either for collaborative documents, shared drawing on a whiteboard app, or other uses to supplement video conferencing on your main device.
2. You can purchase a very basic tablet (such as the Kindle Fire 8) for under \$100 that will be sufficient for classroom use. More advanced tablets are available for at a wide range of price points, from \$150-\$800.

Stylus for more precise writing/drawing

1. Your choice of stylus will be specific to your tablet. We recommend, for those machines that support it, a digital or Bluetooth-connected stylus.
2. The price of a stylus can range from \$8-\$140. Please verify that the stylus you purchase will work with your particular tablet. Some tablets, like the Kindle 8, do not support a bluetooth stylus.

Drawing pads

1. A drawing pad (for instance the Wacom or Huion device) can also be used to make drawing possible on computers without a touchscreen, but, for most users, the drawing function of a touchscreen tablet, especially with a stylus, is more precise and intuitive.
2. A drawing pad can be purchased for under \$50.

Touchscreen laptop

1. If you would prefer to have a single device that meets all needs, you can purchase a touchscreen laptop, which can be used for video conferencing as well as virtual whiteboard and other supplemental applications.
2. If you choose to go this route, you will have to share screen space between the faces of your peers and the board or other app on which you are working.
3. A touchscreen laptop (such as the Lenovo Yoga) can be purchased for under \$500.

Unacceptable: Phones and Chromebooks

1. Phones are not adequate to our needs, both because of limited Zoom functionality and limited visual engagement with the class.
2. Chromebooks are not adequate because they cannot run a native Zoom application.

SOFTWARE RECOMMENDATIONS

In addition to a computer that is new enough, with a screen that is large enough, to fully participate in video conferencing, we also recommend the following software.

1. Microsoft Office 365 and its downloadable apps, using the license provided by SJC to all students. You will be able to download and install MS Office applications including Teams to communicate and collaborate with the rest of the SJC community.
2. An up-to-date antivirus program
3. Ziteboard. In anticipation of the start of term, you may want to become familiar with this collaborative white-board website and see what you are able to draw, either with your mouse/trackpad or with your finger/stylus on a touchscreen. Go to

ziteboard.com and sign up for a free account. This application is free to use but not supported by the IT Department.

4. Individual tutors/tutorials may provide or ask you to obtain other free software to enhance your ability to participate in class.

FURTHER NOTES FROM IT SERVICES

The college's default communication methods for administrative functions are email and Teams chat and audio/video conferencing. Faculty tend to use email for communication. Please use your assigned SJC email account for these purposes. If you need technical assistance, you can create an ITS Help Desk ticket by emailing user.support@sjc.edu.

ITS also provides a training site for Office 365 apps at sjc.o365support.com/home. Please visit this web site to use Office 365 online or to install Office apps on your personal computers: microsoft.com/en-us/microsoft-365/free-office-online-for-the-web