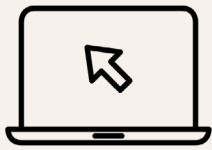
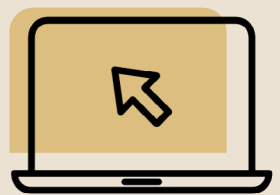


Technical Requirements for Successful Online Learning & Teaching



Personal Computer

- Access to a personal desktop or laptop computer with administrator privileges is highly recommended.
- For optimal performance, update your computer frequently (*As of October 2021: Windows 10 and macOS Monterey 12.1 or macOS 11.6.2 Big Sur*).
- Other devices such as a tablet or smartphone may not provide the user with enough flexibility or ability to seamlessly toggle through various programs and documents.
- **ChromeOS devices are not recommended.**



Internet Connection

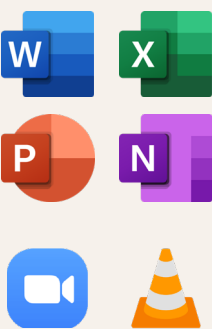
- High speed broadband access (*LAN, Cable or DSL*) is highly recommended for an optimal learning experience.
- It is ideal to have network speeds greater than 10 Mbps down/2 Mbps up per individual on a network. You will still be able to perform what is necessary with lower speeds but you may encounter slow download speeds, poor audio/video quality or lagging.
- For faculty, it is critical to have a stable and reliable internet connection so students are able to communicate with you in the absence of face-to-face interaction.
- Relying on a library or a café for internet access is not recommended as there may be usage/access restrictions, poor Wi-Fi signals and dropped internet connections.
- [start.ca](#) and [teksavvy.com](#) both offer competitive rates without a contract that are ideal for any budget.
- Test your current internet speeds at [www.fast.com](#).



Internet Browser

Recommended internet browsers:

- **Google Chrome**
- **Firefox**
- **Safari**
- Keep your browsers up-to-date
- It is encouraged that you have more than one browser installed as not all websites work properly with all browsers.



You have free access to the following software:

Microsoft Office 365

- Contains a suite of programs that allow for the creation and presentation of learning materials
- To download, go to [myoffice.uwo.ca](#) and login with your Western email address
- You can use the programs directly in your web browser or select the "Install Office" button to download the Microsoft applications directly onto your computer

Zoom

- All students, staff and faculty at King's have access to their own Zoom video conferencing account via their Western credentials by visiting [www.westernuniversity.zoom.us](#).
- Brief tutorials on how to access Zoom, how to conduct Zoom meetings and how to keep meetings secure can be found at [www.kings.uwo.ca/mop](#).

VLC

- A media playback software application that supports nearly every conceivable audio and video format.
- Download at [www.videolan.org](#).

Audio-Visual Input/Output Devices

Speakers or headphones, a microphone and webcam will be required in order to participate in live meetings or webinars.

- Most new laptops come with a built-in camera, microphone and speakers. Very old laptops generally just have speakers. Desktop computers with basic monitors will require these external devices that can be purchased from a variety of vendors.
- **Headphones** with an attached microphone may also be used and are likely to offer the best experience when connecting with others in video conferences.
- It is important to ensure **compatibility** between the computer and the external devices being considered before purchasing (*see below for video camera and microphone recommendations*).

For Faculty

- It is imperative to have a high-quality microphone and camera to avoid loss of audio/visual clarity from a viewer's perspective.
- Faculty should review their recorded content before posting to ensure that it is satisfactory for the learning experience of their class.
- Lectures should be recorded in a quiet location that is free of noise that will be picked up by the microphone.
- Be mindful of the setting, as students will see everything put on the screen, including whatever is in the background.



FOR FACULTY

Recording Video Lectures



- Zoom can be used to record lectures with or without video and with or without slides or screen sharing.
- A brief tutorial on how to do this can be found at [www.kings.uwo.ca/mop](#).

Video Editing



- Open Shot is a free and relatively user-friendly application for editing videos. It can be downloaded from [www.openshot.org](#).
- A brief tutorial on editing with this application can be found at [www.kings.uwo.ca/mop](#).
- There are also many tutorials on YouTube that demonstrate how to perform specific tasks with OpenShot.

UPGRADING YOUR AUDIO AND VIDEO CAPABILITIES



Microphones

- The Blue series of microphones are a great place to start when looking to dive into professional sounding audio. Below are several options that range from \$50 to \$200, generally.
- The [Blue Snowball](#) is a good option for the price.
- The [Blue Yeti Nano](#) is a better option with a more robust build, a headphone out jack and excellent sound.
- The [Blue Yeti Standard](#) has gain control and excellent pattern options as well as a headphone jack.
- The reviews on the [Fifine USB mic](#) are good and it seems to be a reasonable option for the price.



Webcams

- The [Logitech C920](#) is an excellent option. It provides 1080p HD resolution at 30 frames per second and the microphone is much better than most laptop mics. Any of the C9XX series are great options, including the [Logitech C922x](#). When available from a reputable seller, these cameras retail for under \$150 under normal circumstances.
- There are several non-Logitech cameras currently available that claim to provide 1080p resolution with 30fps and many of these have decent reviews. Purchasing one of these webcams may be a reasonable option, but one must be aware of inflated pricing compared to branded models. It is also important to purchase from Amazon (not third-party Amazon suppliers) to avoid lengthy delivery times and poor return policies.
- Availability for all the microphone and webcam options above can be spotty and one must be aware of price gouging. If a name-brand is desired, it is a good idea to check each day until they're available directly from a preferred retailer. Demand is high, but with vigilance, one should be able to find what is required.