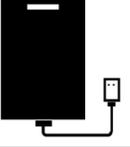


Technology Guide, 2022-2023

Greetings from the technology staff at the J-school. We oversee the computers, cameras, recorders and related gear that you'll be using during your time here. In this letter, we'll describe what we have on hand for your use and what you need to bring with you. We'll also give suggestions for those of you who want to acquire cameras and other optional equipment, and we'll tell you how to obtain a [student discount \(Links to an external site\)](#). when making your purchases.

You must bring:	Strongly recommended	Optional
 <p>An external hard drive that meets these minimum specifications:</p> <ul style="list-style-type: none"> • USB-C, USB 3.0 and/or Thunderbolt connections • 1TB or more recommended for students who plan to enroll in video or audio classes • Speed of 7200 RPM (speed is especially important for video students) or Solid State (SSD) technology.  <p>You must also bring an SD, SDHC, or SDXC card. We recommend a card rated UHS Speed Class U3 or higher(UHS Speed Class U3 is necessary for video). This will be sufficient for use with any of the Journalism School Equipment, be it video, photo, or audio. In addition, we highly recommend that you buy a full-size SD Card and not a microSD card with the full size adapter.</p> <p><i>(For more information, see below.)</i></p>	 <p>Smartphone: <i>iPhone or Android, with the most up-to-date operating system available for that model, plus an analog adaptor for your smartphone if it's a model (such as iPhone 7), which only supports digital audio.</i></p>  <p>Laptop computer: <i>Specifications depend on how much multimedia you plan to do; details below.</i></p>	 <p>If you plan to pursue photojournalism, you may want to bring a digital SLR camera with the following minimum requirements:</p> <ul style="list-style-type: none"> • Records in standard formats — .jpg, .tiff, RAW (no proprietary software required) • At least 10 megapixels • Offers full manual controls • Records to removable flash media <p><i>(For a list of specific models that meet these requirements, see below.)</i></p>



Computers & Laptops

The J-school is a Bring Your Own Device (BYOD) environment.

If you don't have a laptop, you may be able to check one out from our equipment room, but that said, there's no guarantee a computer will be available every time you need one so we **strongly** recommend that you bring a laptop computer if at all possible. The minimum specifications are listed below. That way, you can work anywhere: in the field, at home, in various spaces inside the school, and, in the nice weather, on the sunny steps of our building. Free wireless access is available throughout the Journalism School and the Columbia campus. If you wish to plug your laptop into one of our available monitor workstations, then you will also need the proper adapters for HDMI, Thunderbolt, USB-C or display port.

Each student will be provided a personal copy of the Adobe Creative Cloud software for use during their time at the school. A download link to your software will be emailed to you at the start of the school year for use on your laptop or desktop computer at home. You can install it on no more than two computers. When [signing in \(links to external site\)](#), be sure to select the "**Continue with Google**" option and use your 'UNI@columbia.edu' as the username.

If you're planning on buying a laptop, think first about what you hope to do while you're here; the medium(s) you plan to pursue should dictate the specifications of your laptop. Here are our recommendations:

If you're planning to purchase a laptop



Minimum laptop specifications for video, photo & audio students:

If you plan to do a lot of video, photo or audio and other multimedia work, we recommend a Macbook Pro, which comes with the suite of editing software that you'll need for multimedia work.

Alternatively, look for a laptop with:

- Operating System: macOS v11 (Big Sur) or later and a computer model that is 2016 or later | Windows 10
- Processor: Intel® 6thGen or newer CPU – or AMD equivalent
- RAM: 16GB Minimum | 32GB Recommended for 4K Video
- Graphics Card: 4 GB of GPU VRAM Recommended
- Ports: USB 3.0, USB-C, or Thunderbolt connections
- Hard Drive: 250GB - 1TB Internal SSD



Minimum laptop specifications for print and data students:

If your interests lie in print or mobile journalism or you're in our data concentration, and don't plan to take video-heavy classes, any laptop that meets the following minimum specifications will be fine:

- Operating System: macOS v11 (Big Sur) or later and a computer model that is 2016 | Windows 10
- Processor: Intel® 6thGen or newer CPU – or AMD equivalent
- RAM: 16GB Minimum
- Ports: USB 3.0, USB-C, or Thunderbolt connections
- Hard Drive: 128GB - 1TB Internal SSD
- Software: Microsoft Office 2019
- Adapters for HDMI or Display Port

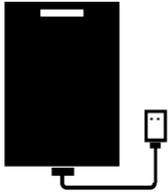
- Software: Microsoft Office 2019
- Adapters for HDMI or Display Port

Note: [Adobe Creative Cloud \(Links to an external site.\)](#) system requirements are an excellent benchmark for a laptop you plan to use to do multimedia work at the school; if a laptop meets Adobe's specs, it will meet ours.

[How to obtain a discount on laptop purchases \(Links to an external site.\)](#)

If you want to purchase a Mac, the MacBook Air with the 256GB flash storage option will be sufficient.

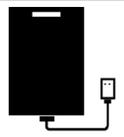
[How to obtain a discount on laptop purchases \(Links to an external site.\)](#)



External Hard Drives

Regardless of the medium you plan to pursue, you're required to have a portable external hard drive, which will enable you to back up your work and transport it from one computer to another, whether on or off campus. Every year students come to us desperately seeking help in recovering material they've lost, but unless they've backed it up, there's rarely anything we can do. An external hard drive is required even if you're planning to use your personal laptop for most of your work here.

When Purchasing an external hard drive



Your portable hard drive should meet the following minimum specifications:

- USB-C, USB 3.0 and/or Thunderbolt connections
- 1TB or more recommended for students enrolled in digital media (video, audio) classes
- Speed of 7200 RPM (the speed is *very* important for students who are taking video) or Solid State (SSD) technology

We recommend the **SanDisk Professional G-Drive**. It offers good value for the price, durability, does not require a power supply, and supports USB3, USB-C connections. The drive comes in a variety of sizes and prices. Before you make a purchase, you should consider what type of work you plan on doing. If you think you plan to do a lot of video work, you may want to purchase a larger drive. If you don't expect to do much video or other multimedia, the capacity outlined above will be fine.



Smartphones

Apple's iOS devices (iPhone, iPad) and the various Android smartphones available are great reporting tools; you can use them for mobile photo, video and audio capture; email or text your instructor if you encounter a problem (or just have a question) while you're out reporting; file stories from the field, and do research while you're on the move. They're also great for

organizing your schedule and even for taking notes when nothing else is handy. While a smart phone is **not** required for J-School programs, it is very helpful. We have a small number of iPod Touches available for short-term checkout in the equipment room for students who don't have smart phones and need them for mobile-reporting assignments. Additionally, you will need an analogue adapter for your smartphone, should it only have support for digital audio output (as is the case, for instance, with the iPhone 7).

Please also note that your smartphone should be running the latest available OS for your model.



Digital SLR Cameras

Our equipment room stocks a large number of Canon Rebel T2i cameras and a more limited supply of T4i cameras available for student use for a small per-semester fee. (More on equipment fees below.) However, our equipment is in heavy rotation, and it's impossible for us to stock the quantities that would be needed to cover every contingency for every student. We prioritize equipment for students in classes that require it, and can't guarantee it will always be available for you when you want it for a project you're working on outside of class.

For that reason, some students choose to bring their own cameras. This is *not* a requirement, and if you aren't planning to seriously pursue photojournalism, there's no reason for you to bring one. But if you are planning to pursue photojournalism, there are advantages to having your own camera: You won't have to check it in or out of the equipment room; you won't be charged equipment fees for using one of ours (more on equipment fees below); and since no one else is using your personal camera, it will always be in the condition in which you last left it. One other benefit: When you graduate, you'll already own equipment with which you're comfortable.

Note: Whether you use your camera or our own, you will need to supply your own SD card and any other recording media.

Also note: We do **NOT** serve as a repair shop. You will be responsible for the maintenance and servicing of your own equipment.

If you're planning to buy a camera



If you decide you do want to purchase a camera, make sure you buy one that meets the following minimum specifications:

- Records in standard formats — .jpg, .tiff, RAW (no proprietary software required)
- At least 10 megapixels
- Offers full manual controls
- Records to removable flash media

Here are some specific cameras that meet those requirements:

Mirrorless cameras

FUJIFILM X-T1
Canon G15
Nikon V2
Nikon Coolpix 7700

Mid-Level SLR:

Canon 60D
Canon T3i
Canon T4i
Nikon D5200

High-Level SLRs

Canon 5D Mk. II, III
Canon 6D
Nikon D600
Nikon D800



Audio Recorders & Accessories

Our equipment room has a large number of professional-quality Tascam dk-100 mkiii recorders and accessories on hand for students working on audio pieces. They will be available for student checkout during the school year. There is no equipment fee for checking out audio recorders. However, priority goes to students in classes that require them, so we don't guarantee they'll always be available to you for projects outside of class assignments. Remember, you will need to supply your own SD cards for use with our audio records. The specifications are listed at the beginning of this document.

Please note: You will need to supply your own SD cards for use with our audio recorders. The specifications are listed at the beginning of this document.

If you're planning to buy an audio recorder



If you decide you want to bring your own audio recorder, make sure that it meets the following specifications:

- Records digitally, preferably to removable media (flash card)
- Can transfer audio files to the computer via USB
- Has an external mic input for plugging in a professional microphone (either XLR, 1/4" or 1/8" adaptable to XLR)
- Records or converts to standard audio format (.wav) without third-party software.

We recommend the TASCAM DR-100 Mark III, or Zoom H4n units since they both accept XLR audio sources.

Important: Be wary of recorders that only record in WMA or other proprietary formats that require software conversion before being imported into Adobe Audition and other NLE Audio editors.

A good source of information on audio recorders for journalists is transom.org. (Links to an external site.)

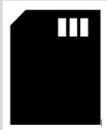


Video Cameras & Accessories

The school provides state-of-the-art Canon XF400 and Canon EOS C200 cameras for video classes that require them, along with tripods, lighting, microphones, and other

accessories. Fees apply for camera checkouts in certain courses. (More information on equipment fees follows.) You are neither expected nor encouraged to purchase your own video cameras, but you are required to provide your own SD card.

When purchasing an SD card



This small, high-capacity memory card can be removed from the video camera when you turn it back in to the equipment room, so that the next person to use the camera doesn't wipe out your work. **To use the full capabilities of our video cameras, you must have a card rated UHS Speed Class U3 or higher.**

Here are two card recommendations:

32GB Card:

[Amazon - 32GB SanDisk SDHC Card \(Links to an external site.\)](#)

64GB Card:

[Amazon - 64GB SanDisk SDXC Card \(Links to an external site.\)](#)

We strongly recommend that you buy a full-size SD card, and not a microSD card with the full-size adapter.

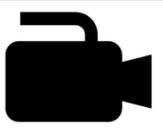
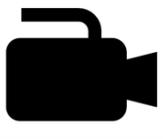
Software

All software and software licenses that you will need during your year here are available to you on our lab computers and are covered under our technology fee. You do not have to purchase special software for our program.

Technology Fees

You aren't required to buy special equipment or software for our program; rather, we make it available for you. However, our lab computers, DSLRs and video recorders are used heavily and do require constant maintenance. As a result, there are a series of fees associated with use of our technology and equipment, as described below. *The equipment fee is per-semester, not per class. So if you need the same equipment for more than one class you **do not** have to pay the fee twice.*

Breakdown of Technology Fees

Fee	What does it cover?	Who pays?	How much?
Technology fee	All computer-lab software licenses, access to tutorials on Lynda.com (a technology training site) & ongoing maintenance of our hard-working lab equipment, including computers and printers, edit suites and general-purpose computer stations	All students	\$1,200
 Video camera: 7-week class	Ongoing preventive maintenance and repairs to cameras and related accessories, such as lenses, lighting kits and microphones.	Students who take Video 1 or 2 as their Image & Sound Module	\$175
 Video camera: 15-week class and/or master's project w/ video)	Ongoing preventive maintenance and repairs to cameras and related accessories, such as lenses, lighting kits and microphones.	Students who take a 15-week spring video-production class; have an instructor's permission to do video stories for a non-video class, and/or are doing master's projects with significant video components.	\$275

 <p>DSLR: 7-week class</p>	<p>Ongoing maintenance and repairs to cameras and camera accessories, such as lenses, lighting kits and tripods.</p>	<p>Students who opt to take Photo 1 or 2 as their Image & Sound Module and want to use our cameras. (If you use your own camera, you won't pay an equipment fee.)</p>	<p>\$50</p>
 <p>DSLR, 15-week photo class and/or photo master's project</p>	<p>Ongoing maintenance and repairs to cameras and camera accessories such as lenses, lighting kits and tripods.</p>	<p>Students using our cameras for a 15-week photo class or to work on a photo-based master's project. (If you use your own camera, you won't pay an equipment fee.)</p>	<p>\$75</p>

Online Technology Training

In addition to the training that you will receive, [LinkedIn Learning \(Links to external site\)](#) is available to you to help fuel your lifetime of learning and professional development.

Student Discounts:

As a student at the J-school, you can obtain a student discount on the purchase of computers, software, cameras and other equipment from vendors such as Apple, Dell and B&H. The links are below; you will need to log in with your Columbia UNI and passcode the view the information:

[Computers \(Links to external site\).](#)

[Audio/Video discounts via B&H \(Links to external site\)](#)