

TECHNOLOGY GUIDE

The NYU Arthur L. Carter Journalism Institute provides an array of tools and equipment designed to help you proceed with assignments. There are instances when the check-out room can't satisfy the demand for equipment–for example, on those occasions when news happens unexpectedly, as it often does.

These days, the working journalist owns a "personal kit" of basic equipment. The Institute has compiled a list of essential items recommended to students interested in purchasing their own equipment. Actual models and prices change frequently, and the Institute does not endorse specific brands or vendors. Nevertheless, based on experience and research, our technology team does offer basic guidelines to students interested in buying their own gear. Please note that we are not responsible for the maintenance and repair of personal equipment.

Regardless of brand, model and vendor, all the field equipment suggested by us meets the following minimum technical requirements:

- All the newly purchased equipment must use solid-state media (CF, SD, P2 cards). This requirement applies to audio recorders, still cameras and video cameras.
- The equipment must allow the user to perform the basic manual adjustments (recording volume, aperture, white balance, shutter speed).
- The equipment must have the appropriate input and output ports/jacks (3.5 mm, XLR, USB, firewire, audio, and video).
- When possible, it is advisable to purchase equipment that runs on standard commercial batteries (AA, AAA) rather than proprietary batteries.

Decisions about what equipment to buy vary according to media (broadcast SD/HD, Web, large screen movie theatre) and should be made in consultation with appropriate faculty.

Audio

(Solid-state media, in/out ports, standard batteries) The sound needed for a radio program, a podcast, a slideshow, or any other type of multimedia production must be recorded at the highest quality possible. While most audio recorders have a built-in microphone, in most instances a good quality sound recording requires the use of an external microphone. Even the most affordable audio recorder must have an external microphone input and a headphone jack. The Equipment Room currently loans the Zoom H4N and Edirol R-09 digital audio recorders (some programs or courses will provide access additional options).

Only purchase audio recorders that offer WAV and MP3 file format recording. For optimal sound recording, an external microphone, a microphone cable, and headphones are needed as well. For current prices, you should check with <u>B&H</u> <u>Photo</u>, or the vendor of your choice. Please note that B&H Photo, located at 9th Avenue and 34th Street, offers educational discounts to matriculated students. Please check with your instructor or a member of NYU Journalism's Multimedia Team before purchasing your camera.

Photography Cameras: DSLR and point-and-shoot

DSLR stands for Digital Single Lens Reflex. The image in the viewfinder is identical to the image that is recorded. The most important advantages of a DSLR camera are its interchangeable lens and the size of its sensor. The larger the sensor, the better quality image. The quality of the lens is even more important than the number of megapixels.

The decision to buy point-and-shoot camera vs. a DSLR camera depends on where the final work will appear and should be made in consultation with an instructor.

While available models and characteristics change constantly, some minimum technical requirements remain for both point-and-shoot and DSLR cameras:

- Manual focus adjustment, manual aperture adjustment, manual ISO speed adjustment, manual white balance adjustment
- A minimum of 5 megapixels resolution
- A USB port for computer connectivity
- Solid-state media (CF, SD, cards)
- Standard file format (.jpg, .RAW)
- Incorporated flash, or a flash port
- Standard AA or AAA batteries for the point and shoot cameras

Photography Cameras: DSLR and point-and-shoot (continued)

Students interested in purchasing a good quality DSLR camera should consider a Panasonic GH5 or any other brand with similar characteristics/specs. There are lowerend DSLR cameras that can perform well in the right hands. Please check with your instructor or a member of NYU Journalism's Multimedia Team before purchasing your camera.

In addition to the DSLR camera body, the student also needs: at least two zoom lenses, covering the focal length range between 16mm to 200mm; appropriate UV filters; two or three 4GB media cards (more megapixels, more storage space needed); at least one additional camera battery. Faster lenses (f2.8) are better than slower lenses (f4-5.6) and the IS (Image Stabilizer) feature can be handy for a fast-moving photojournalist.

As long as the minimum technical requirements listed above are met, students can choose any brand and model of a point-and-shoot camera (it is worth remembering that, if used properly, a smartphone camera can capture a perfectly suitable image).

Video Cameras

Our minimum technical requirements for any video camera are:

- External microphone input
- Headphone audio jack
- Manual focus adjustment, manual aperture adjustment, manual white balance adjustment, (manual shutter speed is a big plus), manual audio input adjustment
- Solid-state media (SD/SDHC card preferred) USB port for computer connectivity
- Standard file format recording (AVI, MOV, H.264, MPEG-4)

Some DSLR's offer both photo and video capabilities, but can prove more limited for audio recording than dedicated video cameras that may lack the photographic features of a DSLR. Please check with your instructor or a member of NYU Journalism's Multimedia Team before purchasing your camera.

While the following items are available for checkout at the Equipment Room, students wishing to purchase their own kits should consider buying additional batteries, media cards, a tripod, a shotgun microphone, a wireless lavalier microphone, a reliable pair of headphones, audio cables, a UV filter, and a carrying bag.

Laptops

All computers in NYU Journalism classrooms and computer labs are Macs, so if you plan on migrating your work between your personal computer and communal computers at school, it is advisable to purchase a Mac as well. If you prefer to use a PC, please talk to a member of the Multimedia Team for quidance.

External Storage

All students should buy their own external hard drives - work cannot be saved onto any NYU Journalism class or lab computers. For optimum performance when working with multimedia projects on Macs, external drives must be formatted to Mac OS X Extended (Journaled). This process will erase all the data on that particular drive.

- The minimum technical requirements for external drives are:
- USB 3.0 or Thunderbolt
- At least 500GB storage (1 TB for anyone making a documentary)
- 7,200 RPM or SSD

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Software

Many NYU Journalism multimedia courses use Adobe Creative Cloud products. While these softwares are available on classroom and lab computers at NYU Journalism, students who want to use Adobe CC on their personal computers can get a student discount on their subscriptions by visiting adobe.com/creativecloud/buy/students.html.

Certain classes may have other software suggestions/requirements. Consult with your instructor or a member of the Multimedia Team.

Recording Booth

NYU Journalism has an acoustically treated room for recording voiceovers and interviews. Located on the 7th floor, this room is equipped with microphones connected to a hardware audio recorder that records directly to your SD card (which you will have to bring yourself). Detailed instructions on how to use this equipment is posted in the booth.