REQUIRED EQUIPMENT & SOFTWARE
Having the required equipment and software will ensure your success in the course. Please read this document carefully, and if you have any questions, contact Alexandre Bui at alexandre.bui@berkeley.edu.

You will need:
1) A laptop with sufficient storage and memory
2) Adobe Creative Cloud (at least 2 months paid subscription)
   • Adobe Audition
   • Adobe Photoshop
   • Adobe Premiere
3) External Hard Drive
4) Stereo Headphones
5) Smartphone-compatible lavalier mic OR handheld reporter mic
6) Video Camera
7) Shotgun microphone compatible with your video camera
8) Tripod compatible with your video camera

Optional:
Lavalier mic compatible with your video camera
Photo camera

For more details on the requirements of each item, please continue reading.
I. Laptop
A Mac or PC laptop is fine; however, the MacBook Air or a laptop older than 2013 may not be sufficient to process the Adobe software or other apps used during the course.

For Macs:
MacBook Pro models are the most competent for audio and video editing. The base models, Macbook and MacBook Air, are not recommended because their processor and memory are insufficient for the amount of editing you will do in this course. You can upgrade to a model with more memory and a better processor, but it will approach the cost of a MacBook Pro at that point. Models older than 2013 may run slowly. *If you have the newest Macbook Pro model (released September 2016), please verify that the equipment you are renting will be compatible with the new USB C & Thunderbolt 3 connections.

Processor:
Intel i7 is best; i5 is fair.
Always try to buy the most current chipset (8th generation).

Memory/RAM:
8GB of memory/RAM is the absolute minimum you will need to work with large amount of data and Adobe software.

This type of internal memory allows your computer to run multiple programs and keep several windows open at a time without crashing. It’s important to have at least 8GB so that you can use media tools to create and change projects quickly. It also allows your system to have multiple computer processes happening at the same time (i.e., surfing the web and saving a photo edit).

Storage:
This type of memory stores your work for the long term, not just long enough for it to appear on your screen.

A solid state internal drive (SSD) with 256GB space should be fine, but an external drive that connects via USB 3.0/3.1 or Thunderbolt is recommended, as video files are quite large.

Graphics chip:
Any is better than none. Fewer and fewer laptops come with one, except at high prices. This component is responsible for the quality of the visual
display (rendering) of your footage on your screen. For fine editing, it is important.

**For PCs:**
Lenovo and ASUS are good brands; however, all brands have a varied range of models and styles. Buying a PC laptop can be difficult, but in general, rely on the specs listed above (processor, memory/RAM, storage, and graphics chip), rather than model names and styles.

Looking at the XPS machines below, the first model is not robust for editing. The second is fair. The third will suit your needs for this class well, and the fourth will take you beyond the needs of this class.

II. Adobe Creative Cloud
Your laptop must be able to effectively process Adobe Creative Cloud, and you'll be expected to install Adobe Audition, Premiere, and Photoshop on your computer. Please note that Adobe has recently changed its trial to be only 7 days long vs. the previous 30, so you will need to pay for at least 2 months of the subscription software ($19.99/month per app, or $49.99/month for access to all apps). *If you have an educational email account – even an old one – try registering with that address to receive the educational discount.*
III. Hard Drive

External Hard Drive
You will need an external hard drive with at least 200GB of free space that can connect to your laptop via USB 3.0+, USB C, Thunderbolt, or Firewire.

USB 2.0 is too slow, and editing video will be very frustrating for you.

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<th>Firewire</th>
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**Recommended Drive**
Samsung T5 SSD

IV. Stereo Headphones
Any good quality stereo headphones that connect directly to your laptop will allow you to edit audio. Standard earbuds will work fine for basic audio work in a quiet space.
V. Video Camera (see Rental Options)
A video camera that accepts XLR cables for audio. DSLRs are also acceptable to use as video cameras. The audio is a bit more complicated to set up, but it can be done. The instructor recommends at least getting a top mic (shotgun or something like this: https://www.amazon.com/Rode-VMPR-VideoMic-Rycote-Shockmount/dp/B00YAZHRZM), but you will also need to use your phone with a lav mic as well (he'll teach you how to sync audio tracks).

VI. Microphones (see Rental Options)
You'll need:
- A short shotgun microphone compatible with your video camera
- Optional: a lavalier microphone compatible with your video camera
- A smart-phone compatible lavalier microphone for audio recording on your iPhone or Android. There are a range of devices within different price ranges, but we recommend the Aputure A.Lav Omnidirectional Lavalierv Microphone, which costs $35:

VII. Tripod (See Rental Options)
A tripod with a head that securely attaches your video camera. Most cameras and tripods have a standard mount, but you will need to verify that your camera will mount to the tripod you select.
VIII. Photo Camera (optional)
The specifications for use of your own camera are as follows: DSLR or other interchangeable lens camera, or a high-quality point-and-shoot with the option to manually control shutter speed and aperture (like a Fuji X100, or higher-end Canon Powershot). You are not required to have a photo camera for assignments in the course.

IX. Other software
Instructors may require additional software or apps to be downloaded during the course. Generally, this software is free or is offered with a free trial period.

RENTAL OPTIONS
If you do not own suitable equipment for your video shoot, you will need to rent it. An option for online ordering is Borrowlenses.com, in which you rent, ship, shoot with, and return your equipment.

Equipment you'll need for the field assignment is as follows. Check with your Berkeley AMI instructors for scheduled video dates in advance of rental (likely week 5). This assures you'll rent the equipment only for the dates you need.

Item 1: Compact camcorder
Sony PXW-X70 Professional XDCAM Compact Camcorder
https://www.borrowlenses.com/product/Sony-PXWX70-Professional-XDCAM-Compact-Camcorder

Kit includes:
Sony PXW-X70 Camcorder
Built-in Zeiss Sonnar T* Lens
AC Adapter
XLR Handle with microphone holder (external microphone not included)
Eyepiece
OLED viewfinder
LCD
Remote
USB Cable
Built-in omni-directional stereo microphone
Lens hood and cap
Battery
Carrying case
Item 2: Cardioid Shotgun Condenser Microphone
Sennheiser ME66 Super-Cardioid Shotgun Condenser Microphone Kit
https://www.borrowlenses.com/product/Sennheiser_ME66

Kit includes:
ME66 - Short Shotgun Mic Capsule
K6 Powering Module (Battery or Phantom)
Alkaline Battery (1.5V)
SG-1 Windscreen
Universal Shockmount for Camera Shoes and Boompoles
1.5' 3-Pin XLR Male to Angled 3-Pin XLR Female
Alfa Case 12.5” MicTube
WindTech B-1 Microphone Pouch

Item 3: Optional lavalier microphone for your video camera
Please note that you will still need a lavalier or reporter (handheld) microphone to use with your smartphone. The lavalier below should be compatible with your video camera and is optional.

Sennheiser EW122-p G3 Hot Shoe Wireless Lavalier Mic
https://www.borrowlenses.com/product/sennheiser_lav

Kit includes:
EK 100 G3 Camera Mountable UHF Receiver
SK 100 G3 Bodypack Transmitter
ME4 Clip-On Cardioid Lavalier Microphone
1/8” Male to 1/8” Male Cable
1/8” Male to XLR Male Cable
Carrying Case
(4) AA batteries are required to power these lavs (2 for the transmitter and 2 for the receiver) and are not included in the rental.

Item 4: Tripod
Sachtler Ace M Fluid Head Tripod System

Kit includes:
Ace M 75mm Fluid Head
Ace Tripod Legs
Ace Mid-Level Spreader
Ace Pan Bar