

# Digital Media Skills Certificate Course

## Equipment & Software

### 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 Diane Villadsen at [dvilladsen@berkeley.edu](mailto:dvilladsen@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 (we will provide a Canon Rebel T3i for you to use)

**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 model, **MacBook Air**, is not recommended because its 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.

### **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.

			
Customizable	Double the Memory	Double the solid state storage	New 6th Gen Intel® Core™ i7
<b>New XPS 13 Non-Touch</b> \$799.99	<b>New XPS 13 Non-Touch</b> \$999.99	<b>New XPS 13 Touch</b> \$1,399.99	<b>New XPS 13 Touch</b> \$1,599.99
6th Generation Intel® Core™ i3 Processor	6th Generation Intel® Core™ i5 Processor	6th Generation Intel® Core™ i5 Processor	6th Generation Intel® Core™ i7 Processor
Windows 10 Home	Windows 10 Home	Windows 10 Home	Windows 10 Home
4GB Memory	8GB Memory	8GB Memory	8GB Memory
128GB Solid State Drive	128GB Solid State Drive	256GB Solid State Drive	256GB Solid State Drive
		Touch Screen	Touch Screen
 Customizable	 Customizable	 Customizable	 Customizable
The XPS 13 is amazing both inside and out with the world's first InfinityEdge display. Includes the new 6th gen Intel® Core™ i3 processor and Windows 10 Home. Choose from options like the new 6th gen Intel® Core™ i5 processor and Windows 10 Pro.	Upgraded with new 6th gen Intel® Core™ i5 processor and Windows 10 Home for enhanced performance. Choose from options like Windows 10 Pro, 256GB Solid State Drive and Quad HD+ InfinityEdge touch display.	Upgrade to a larger hard drive and Quad HD+ InfinityEdge touch display for eye-popping detail. Choose from options like Windows 10 Pro, and 128GB Solid State Drive.	Upgrade to the new 6th gen Intel® Core™ i7 processor, Windows 10 Home and Quad HD+ InfinityEdge touch display for eye-popping detail. Choose from options like Windows 10 Pro.

**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+, Thunderbolt, or Firewire.

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

#### Hard Drive Connection Examples

##### USB 3.0



##### Thunderbolt



##### Firewire



### 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.



## 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 OR a hand-held microphone for audio recording on your iPhone or Android. There are a range of devices within different price ranges, but we recommend the following. **The \$29 Audio-Technica lavalier mic is our top choice for both budget and quality.**



\$29 [Audio-Technica omnidirectional lavalier mic](#)

\$49 [IK Multimedia iRig Mic](#)

\$79 [Rode smartLav+](#) (higher-end option)



OR



OR



## 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. 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](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](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

<https://www.borrowlenses.com/product/Sachtler-Ace-M-Fluid-Head-with-2Stage-Aluminum-Tripod--MidLevel-Spreader>

*Kit includes:*

Ace M 75mm Fluid Head

Ace Tripod Legs

Ace Mid-Level Spreader

Ace Pan Bar