

**General requirements and information:**

- A Mac or PC laptop computer is required—most current operating systems are acceptable, with some restrictions as outlined below.
- Microsoft Office (Word, Excel, PowerPoint) is required. **OHSU working on offering a free version for students—we should have details by June 1.** Until then, don't purchase if you don't need to.
- Encryption: Your device must be encrypted (more info below in **REQUIRED SOFTWARE**).
- A smartphone is required: iPhone or Android.
- Computers and smartphones are required for the Computer Orientation session during the first week of classes. Microsoft Office must be installed on your device prior to the Computer Orientation session.
- We run a paperless classroom. All lecture and course materials are provided as pdf documents via our course web pages.
- Wireless access is available in every campus building.
- Instructional videos on note-taking and encryption will be available in early June.

**COMPUTER REQUIREMENTS**

**Acceptable operating systems:**

- PC: Windows 10 Home, Pro, Enterprise, or Education. Most consumer models come with Home.
- Mac: OS 10.14 Mojave or better

**Tech support:**

There is no official OHSU tech support for student computers. Students are *strongly* encouraged to purchase manufacturer support programs such as AppleCare. Some retailers offer extended warranties and accident protection.

**Speed and memory:**

Any laptop manufactured in the past two years should be more than fast enough and have sufficient memory for classroom use. Besides Microsoft Office, we require that you install a few relatively small pieces of software. See also, iPad recommendations below.

**Size and weight:**

You will be carrying this machine every day. A lighter machine with a 13-14" screen may be the best option. Keep in mind you will most likely be commuting by bus, train, bike or on foot. See also, iPad recommendations below.

**Updates and upgrades:**

You are required to keep your computer updated, and if necessary, purchase upgrades.

**Mac users:**

By a very wide margin, the most popular student laptop type is a MacBook.

**iPads:**

About 25% of students use an iPad 90% of the time and keep a laptop computer for the other 10%. iPads are small and lightweight and are helpful for note-taking and especially for carrying/reading electronic textbooks. Most of our electronic exams can be accessed with the Exemplify app for iPad. Microsoft Office is not optimal on iPad. **OHSU does not currently allow electronic medical records (Epic) training access on mobile devices. EMR/Epic training is part of the curriculum beginning in the first year, therefore an iPad alone will not be sufficient for PA school.**

**Note that occasionally and without warning, OHSU may suspend iPad functionality with OHSU systems.**

## REQUIRED SOFTWARE

### Encryption:

- Mac: Enable [FileVault](#)
- PC: See the articles below for background and instructions. PC encryption is a bit trickier than on a Mac
  - From Microsoft: [Device Encryption or Bitlocker](#)
  - [Microsoft Device Encryption or Microsoft Bitlocker](#)
- iPad: minimum 6-digit alpha-numeric password
- Further details in early June.

### Microsoft Office (Word, Excel, PowerPoint):

- **OHSU working on offering a free version for students—we should have details by June 1.** Until then, don't purchase if you don't need to.
- Microsoft Office on iPad is not optimal.
- Microsoft Office must be installed on your device prior to the Computer Orientation session during the first week of classes.

### Windows Defender:

- For PCs: Know how to disable/re-enable Windows Defender (antivirus software that comes stock with Windows).

### Exemplify / Examssoft:

- Computer application we use for most of our exams.
- Further details in early June.

## ADDITIONAL SOFTWARE AND HARDWARE

### Web browsers:

- Install [Firefox](#) and [Chrome](#) web browsers prior to Computer Orientation.

### Note-taking software:

- We run a paperless classroom. All lecture and course materials are provided as pdf documents via our course web pages. During the Academic Year, you will acquire over 800 class work documents.

***Be familiar with the basic operation of your note-taking software before day one of classes.***

### Lower-tech note-taking—using the comment tools (pencil, highlight, textbox, etc.):

- Adobe Reader (free)
- Preview (free Adobe Reader clone bundled with Mac OS)

### Slightly higher-cost, higher-tech note-taking and organizing:

- OneNote (PC or Mac)—about 60% of PA22 uses it
- Notability (iPad or Mac)

### Storage and backup options:

- Cloud services: **OHSU working on offering a free version for students—we should have details by June 1.**
- Drive: 1T external drive for less than \$100; Mac Passport. External drives also need to be encrypted.

### Printer:

- Many students own a personal home printer. Student printing is available in the building in the graduate student study lounge .

## SMARTPHONE REQUIREMENTS

- A smartphone is required: iPhone or Android.

## FINANCIAL AID FOR TECHNOLOGY

### **Financial aid will increase your aid budget for the purchase of one computer to include the following:**

- \$2000 (maximum) allowance for:
  - laptop
  - required software (Microsoft Office which must include Word, Excel, PowerPoint)
- Separate from the \$2000 allowance, the financial aid package will also include:
  - \$78 per month for your internet service provider (ISP)

If you purchase a new computer for PA school, you can request your financial aid budget to be increased up to a maximum of \$2,000. To do so, please see the form on page 5. This must be done closer to the beginning of the program. You will submit the form and receipts to the Financial Aid Office, then your loans will be increased for the amount of the purchase. If you are using a currently owned computer that meets our specifications, you don't need to do anything with Financial Aid. If you have questions, please contact the Financial Aid office at 503-494-7800 or 800-775-5460.

## WORDS OF WISDOM FROM PA STUDENTS

### **Note-taking Applications**

"Find a good note taking program BEFORE classes start. Ask your friends and classmates, but have the program loaded on your computer and know how to use it before classes start."

"I use OneNote (PC) for everything and love it. As an older student, going back to school in a paperless world was an adjustment. One Note is my virtual Trapper Keeper – it's perfect for taking notes and organizing my life!"

"OneNote does not have all the same features on a Mac as it does a PC, however I have a Mac and it still does everything I need it to."

"OneNote is far-and-away the easiest to use/most robust note taking software out there, if you like a more 'traditional' layout organized by term, class, lecture, etc."

"I am not tech savvy, so didn't want to use anything high-tech. It has worked best for me to just keep things simple – view PDFs in Adobe Reader, and take notes into our objectives in an MS Word document. It has been more helpful for me to have all of my notes compiled in a single Word document, rather than in several PDFs."

"Whichever note-taking software you use, two rules: (1) Get a skeleton/organizational system from day 1 and (2) BACK UPS!!"

"Notability is great! Don't use anything else really. It serves 90% of my note-taking needs."

"Notability works great if you go from iPad to Mac and especially if you're doing a lot of handwriting on your iPad. I started with one note and switched to notability because it works a lot better for me with the iPad pro. I also find that the syncing is a lot better between my devices with notability."

"I actually take notes on paper during our classes, and sometimes supplement with notes in OneNote. Embrace how you learn!"

### **Laptops and iPads**

"I love my MacBook Pro. I know a lot of people also like their MacBook Airs. To me, the extra weight doesn't make much of a difference."

"If you have one that meets the specs, don't worry about getting another one. Update your memory and sure you have an external hard drive just in case something happens. However, I am one of several students that takes notes on an iPad and I would highly recommend it. I have better focus during lecture. If you have the funds and you are on the fence about getting a tablet, just do it. You will be happy you did. Plus, having 2 screens in class (laptop/tablet) is great and adds minimal weight to your school commute."

"I am very glad that I purchased a new Macbook before starting school. It has been very nice to not be fighting technical difficulties too often."

“Do it – get something nice, dependable, AND with a 2-year protection plan, because accidents happen and your computer will be INTEGRAL in everything you will be doing. Period. P.S. Mac (as ever over the past 10 years) is a popular option, but popular does NOT equal better. Microsoft Office is required, and there can be issues with Macs and Microsoft products, so keep that in mind.”

“Within reason, get the nicest, fastest, best machine you think you can afford. Having a good computer will pay dividends every day. Consider tablets or cross-overs (Microsoft Surface, etc) for in class.”

“Getting a computer with a long-lasting battery, and knowing how to get the most out of the battery. I bought my MacBook Air just for this reason, and having a solid 12 hours of battery a day is a must, especially if you ride a bike to school and space in your backpack is in high demand, so no need to bring a charger.”

“I would recommend using whatever you have been most comfortable with in the past. There is so much to learn and process in the first few weeks of school and learning how to use a computer should not be one of them!!”

“I use an older MacBook and it is still working great. I was a little nervous about using it for school because it isn't brand new, but I am happy I did. I would say if you have a reliable computer, you don't need to buy a new one for school.”

“I debated between the MacPro and MacAir and am very happy with the Air. It has been a great computer to work with and significantly lighter than the Pro which is a big deal as you carry your computer everywhere during school.”

“I use an iPad pro for daily note taking with the apple pencil. I really like that I can draw directly on the slides and pictures. It's the perfect combination of technology and "old-school" paper note-taking.”

“I wanted to have a lighter and smaller laptop (Surface Pro fit the bill here) because I knew that I would either be bike commuting or having a long public transit commute. The surface pro also has a very long battery life for a laptop. I have made it through an entire day, 8a-5p, taking notes in back-to-back lectures without recharging.”

“I did not have the resources to purchase an i-pad in addition to a laptop so I went for a small, light, laptop with a touchscreen that can convert to tablet mode. It has USB so I can plug in a mouse (which I can't live without). Don't feel like you have to purchase an Apple product.”

#### IF YOU HAVE FURTHER QUESTIONS

Within every PA class, we have a wide range of ages, experience and technology skill levels. Our Education & Technology Coordinator, Bob DeBarge, is more than happy to discuss what options might work best for you. Contacting your PA22 buddy for advice might also be helpful.

Bob DeBarge, MFA  
Education & Technology Coordinator  
503-494-1447  
[debarger@ohsu.edu](mailto:debarger@ohsu.edu)



### 2021-22 Computer Cost Adjustment Request Form

Student Name \_\_\_\_\_ Student ID (UID) \_\_\_\_\_

To request to have your financial aid budget increased due to educationally related computer costs, you must complete the following:

**Note:** Your budget will not be increased more than **\$2000** for the computer costs. This is a one-time budget adjustment for one computer. The computer costs cannot include items such as: IPODS, carrying cases, extended warranties, and supplies for the computer (i.e., paper and ink cartridges). **The costs must be incurred during the current academic year.**

Please be aware, if you are already awarded the annual maximum in federal and state financial aid, the increase in your budget will only increase your alternative loan eligibility (or if a graduate student who applied, your Federal Graduate PLUS loan). If your budget increase results in additional alternative loan eligibility, you would then need to apply for the alternative loan to see if you qualify for it.

- 1. Describe what computer components were purchased:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- 2. Date purchased: \_\_\_\_\_

- 3. Total amount: \$ \_\_\_\_\_

- 4. Attach a copy of the itemized list of computer equipment purchased, date purchased, and proof of payment. The itemized list must include the company's name.

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Return form to: OHSU Financial Aid Office  
3181 SW Sam Jackson Park Road  
Mail Code L109  
Portland, OR 97239-3098  
Fax: 503-494-4629  
Email: [finaid@ohsu.edu](mailto:finaid@ohsu.edu)

**COMP**

## Tech Specifications Remote Learning Addendum for the Class of 2023

With the current PA students we've added additional information specifically for making online learning go as smoothly as possible. If you have questions, don't be afraid to reach out to your PA22 buddy or the PA Program's tech person, Bob DeBarge, at [debarger@ohsu.edu](mailto:debarger@ohsu.edu).

### Web cam and microphone

The only things that are absolutely necessary for online classes are a computer, webcam and mic, and the Internet. The good news is that 99.99% of laptops built in the last 5 years come with a webcam and mic and they are of generally decent quality even on the least expensive machines—you would have paid significantly more money for a laptop without a webcam and mic. If you are working from a desktop machine, you'll obviously need to purchase a webcam and mic. Logitech is a great brand with a long service life, with many models well under \$100.

### Internet

With other members of your household also using Internet resources—gaming, Netflix, Zoom, etc.—you might find that your Internet slows way down. Surprisingly, we've had very few complaints from PA22 about slow speeds.

- The cheapest way to (hopefully) fix any issues is to connect your laptop via an Ethernet cable rather than WiFi. For most computers you'll need an Ethernet adaptor (\$15) to match whichever (typically USB 3 or USB-C) input jacks your laptop has. You'll need to run an Ethernet cable (\$15 and up) from your laptop to your router; just make sure to get one long enough so that it's out of harm's way and is not a tripping hazard.
- Upgrading your router and/or modem to something more powerful. If you pay monthly rental on them from your Internet service provider anyhow, this option will might save you money in the long run. Ballpark: \$200 but you can spend a bit less or significantly more. A signal repeater might also be an option if you are a long way from your router.
- Upgrading your Internet with your service provider.

### Headphones/Mic

If there is distraction in your environment (pets, family, roommates, etc.) you might want headphones.

- Wired or Bluetooth
- With or without built-in microphone
- You might already own a set (e.g. Apple) that will work.
- Noise-cancelling models are nice, though relatively expensive.
- Logitech is a great brand with a long service life, with many models well under \$100.

### Second screen

During live lectures or recordings, you can put Webex on one screen; note taking, objectives, text books on the other. There are a number of ways to do this:

- iPad or other tablet
- Large second monitor attached to laptop (new models start at about \$125). Make sure you have a proper cable and/or adaptor to connect (e.g., HDMI or USB-C to match whatever input jacks your laptop has). Many, but not all, monitors come with an HDMI cable.

- Connect to your TV with an HDMI cable or with wireless TV dongle, e.g., Chromecast (\$35) or Apple TV box (\$200). You can stream to your TV from a phone, tablet or laptop computer.

**Other options suggested by current PA students:**

- Larger desk or work area to accommodate everything
- Wireless keyboard/mouse
- Laptop stand (Raises laptop screen up to eye level, use wireless (or wired) keyboard underneath on desktop).
- Hard copy of certain textbooks to save screen real estate (ask individual course directors).