

Introduction and Purpose:

This document outlines the minimum specifications for laptops to use at CHSU to be effective with the requirements to achieve the learning outcomes of the curriculum.

This document is not intended to be a complete specification of system requirements, but rather highlight the required elements of the laptop configurations.

Note: The requirement is to use a laptop computer and NOT another digital device including tablet computers (e.g., iPads, Chromebooks, etc.) or smartphones.

Laptop Requirements:

Windows Laptops

Recommended elements for Windows Laptops are as follows:

1. Hardware:

- a. 8GB of RAM; 16GB recommended
- b. CPU processor equivalent to Intel i5 540m 2.5 GHZ or higher processor (ARM processors are not supported)
- c. 256GB or larger hard drive / solid state drive
- d. Display resolution of 1024 x768 or higher
- e. Must support audio & video input and output (e.g., camera, microphone, speakers, etc.)
- f. Wireless card to support 802.11n wireless network access via WPA2 Enterprise encryption
- g. Capable of Bluetooth wireless communication
- h. At least one USB port capable of downloading/uploading material to a flash drive.

2. Software:

- a. Microsoft Windows 64-Bit 10 or Windows 11 (alternate versions of Windows 10, such as Windows RT and Windows 10 S, are NOT supported)
- b. Browsers:
 - i. Google Chrome
 - ii. Microsoft Edge
- c. Adobe Reader DC (latest version)
- d. Video player software to play MP4 files
- e. Current version of Examplify (Examsoft testing client)
<https://help.examsoft.com/s/article/Exam-Taker-Quick-Start-Guide>
- f. Cisco Webex, Microsoft Teams, and Zoom web conferencing clients (latest version)

Note: Required Microsoft office products will be available via Microsoft 365 access with your chsu.edu ID

Apple Laptops

Required elements for Apple laptop purchases are as follows:

1. Hardware:

- a. 8GB of RAM; 16GB recommended
- b. CPU Intel or M1 processor. Apple M1 processors are supported via Rosetta 2
- c. 256GB or larger hard drive / solid state drive
- d. Display resolution of 1024 x768 or higher
- e. Must support audio & video input and output (e.g., camera, microphone, speakers, etc.).
- f. Wireless card to support 802.11n wireless network access via WPA2 Enterprise encryption
- g. Capable of Bluetooth wireless communication
- h. At least one USB port capable of downloading/uploading material to a flash drive.

2. Software:

- a. Catalina, Big Sur, and Monterey
- b. Browsers:
 - i. Google Chrome
 - ii. Safari
- c. Adobe Reader DC (latest version)
- d. Video player software to play MP4 files
- e. Current version of Examplify (Examsoft testing client)
<https://help.examsoft.com/s/article/Exam-Taker-Quick-Start-Guide>
- f. Cisco Webex, Microsoft Teams, and Zoom web conferencing clients (latest version)

Note: Required Microsoft office products will be available via Microsoft 365 access with your chsu.edu ID

<https://examsoft.com/resources/examplify-minimum-system-requirements/>

Required Device for 1st-year Anatomy Curriculum

- a. New Issued HoloLens 2 Device deployed by Case Western Reserve
- or
- b. Gently Used HoloLens 2 including HoloAnatomy Software & Case Western Licensing

Butterfly IQ+ Probe

[Devices](#) Compatible with Butterfly iQ+

Apple iOS

- The Butterfly iQ app is available on Apple iOS 14.0 or newer. We are not compatible with beta versions of iOS. To update your mobile device, please follow the steps here.

Lightning:

0. iPhone 13
1. iPhone 13 Mini
2. iPhone 13 Pro
3. iPhone 13 Pro Max
4. iPhone 12
5. iPhone 12 Pro
6. iPhone 12 Pro Max
7. iPhone 12 mini
8. iPhone 11
9. iPhone 11 Pro
10. iPhone 11 Pro Max
11. iPhone XS Max
12. iPhone XS
13. iPhone XR
14. iPhone X
15. iPhone 8
16. iPhone 8 Plus
17. iPhone 7
18. iPhone 7 Plus
19. iPhone SE (1st and 2nd generation)
20. iPhone 6s*
21. iPhone 6s Plus
22. iPad Pro (12.9-inch) (1st and 2nd generation)
23. iPad Pro (10.5-inch)
24. iPad Pro (9.7-inch)
25. iPad (5th*, 6th, 7th, 8th, and 9th generation)
26. iPad Air 3rd generation
27. iPad mini 5th generation
28. iPod Touch 7th generation (not recommended)

USB-C:

- i. iPad Pro (12.9-inch) (3rd, 4th, and 5th generation)
- ii. iPad Pro (11-inch) (1st, 2nd and 3rd generation)
- iii. iPad Air 4th generation

iv. iPad mini 6th generation

*Use of the iPhone 6S or iPad 5th generation is not recommended with the Butterfly iQ+.

Samsung Devices

Use of the Butterfly iQ with USB-C connectivity with Samsung mobile devices requires Android version 9 or newer. We are not compatible with beta versions of Android.

- i. Samsung Galaxy S8 International Edition (Models SM-G950F & SM-G950FD)
- j. Samsung Galaxy S8+ International Edition (Models SM-G955F & SM-G955FD)
- k. Samsung Galaxy S9
- l. Samsung Galaxy S9+
- m. Samsung Galaxy Note 9
- n. Samsung Galaxy S10 Lite
- o. Samsung Galaxy S10 US Edition (Models SM-G973U & SM-G973U1)
- p. Samsung Galaxy S10+ US Edition (Model SM-G975U)
- q. Samsung Galaxy S10e US Edition (Model SM-G970U)
- r. Samsung Galaxy Note 10 US Edition (Models SM-N970U & SM-N970U1)
- s. Samsung Galaxy Note 10+ US Edition (Models SM-N975U & SM-N975U1)
- t. Samsung Galaxy S10 Canadian Edition (Model SM-G973W)
- u. Samsung Galaxy S10+ Canadian Edition (Model SM-G975W)
- v. Samsung Galaxy S10e Canadian Edition (Model SM-G970W)
- w. Samsung Galaxy Note 10 Canadian Edition (Model SM-N970W)
- x. Samsung Galaxy Note 10+ Canadian Edition (Model SM-N975W)
- y. Samsung Galaxy S20
- z. Samsung Galaxy S20+
- aa. Samsung Galaxy S20 Ultra
- bb. Samsung Galaxy S20 FE
- cc. Samsung Galaxy Note 20
- dd. Samsung Galaxy Note 20 Ultra
- ee. Samsung Galaxy Tab S6
- ff. Samsung Galaxy Tab S7
- gg. Samsung Galaxy Tab S7+
- hh. Samsung Galaxy S21 5G
- ii. Samsung Galaxy S21 Ultra 5G
- jj. Samsung Galaxy S21+ 5G
- kk. Samsung Galaxy Tab Active3

We perform extensive hardware verification. The Samsung Galaxy S10 and Note 10 International variant devices were unable to achieve the transfer rate cutoff necessary for clinical imaging. As a result, we only support the Galaxy S10 and Note 10 US and Canada Editions.

Please note that the Samsung Galaxy Tab S6 Lite and Tab S7 FE are not supported.

Google Devices

Use of the Butterfly iQ with USB-C connectivity with the Google Pixel requires Android version 10 or newer.

- i. Google Pixel 3
- ii. Google Pixel 3 XL
- iii. Google Pixel 4
- iv. Google Pixel 4 XL
- v. Google Pixel 6
- vi. Google Pixel 6 Pro

Please note that the Google Pixel 3a, 4a, 5, and 5a are not supported.

OnePlus Devices

Use of the Butterfly iQ with USB-C connectivity with OnePlus mobile devices requires Android version 10 or newer.

- i. OnePlus 7T
- j. OnePlus 7T Pro
- k. OnePlus 7
- l. OnePlus 7 Pro
- m. OnePlus 8
- n. OnePlus 8 Pro
- o. OnePlus 8T
- p. OnePlus 9
- q. OnePlus 9 Pro