Introduction and Purpose:

This document outlines the minimum specifications for laptops to us 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 802.1N 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 10, 64-bit, version 22H2 or Windows 11 <u>ONLY</u>
    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, Micosoft 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. M2 strongly encouraged
    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 802.1N 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. Required Operation System: macOS Big Sur, Monterey, or Ventura ONLY
    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, Micosoft 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:

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

USB-C:

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