Introduction and Purpose:

This document outlines the minimum specifications for laptops at CHSU to be effective with the requirements to achieve the learning outcomes of the curriculum for exams and quizzes. 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: you must use a laptop computer and NOT another digital device including tablets (e.g., iPads, Chromebooks, etc.) or smartphones.

Laptop Requirements:

Windows Laptops (Preferred)
  Highly 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 802.11ax (Wi-Fi 6) 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 ONLY
   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 (Acceptable, but not recommended)
    Required elements for Apple laptop purchases are as follows:

1. Hardware:

    a. 8GB of RAM; 16GB recommended
    b. M1 processor required. M2 processor 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 802.11ax (Wi-Fi 6) 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. The HoloLens 2 includng Holoanatomy Software & Case Western University Licensing will be temporarily leased to you through CHSU-COM.

Butterfly IQ+ Probe

Below is a [list of devices](#) that are 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:

Preferred
1. iPhone 14
2. iPhone 14 Plus
3. iPhone 14 Pro
4. iPhone 14 Pro Max
5. iPhone 13
6. iPhone 13 Mini
7. iPhone 13 Pro
8. iPhone 13 Pro Max
9. iPhone 12
10. iPhone 12 Pro
11. iPhone 12 Pro Max
12. iPhone 12 mini
13. iPhone 11
14. iPhone 11 Pro
15. iPhone 11 Pro Max
16. iPhone XS Max
17. iPhone XS
18. iPhone XR

Acceptable
19. iPad Pro (12.9-inch) (1st and 2nd generation)
20. iPad Pro (10.5-inch)
21. iPad Pro (9.7-inch)
22. iPad (5th*, 6th, 7th, 8th, 9th, and 10th generation)
23. iPad Air 3rd generation
24. iPad mini 5th generation

USB-C:

Preferred
1. iPhone 15
2. iPhone 15 Plus
3. iPhone 15 Pro
4. iPhone 15 Pro Max

Acceptable
5. iPad Pro (12.9-inch) (3rd, 4th, 5th, and 6th generation)
6. iPad Pro (11-inch) (1st, 2nd, 3rd, and 4th generation)
7. iPad (10.9-inch) (10th generation)
8. iPad Air 4th and 5th generation
9. 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. It is not compatible with beta versions of Android.

1. Samsung Galaxy S9
2. Samsung Galaxy S9+
3. Samsung Galaxy Note 9
4. Samsung Galaxy S10 Lite
5. Samsung Galaxy S10 US Edition (Models SM-G973U & SM-G973U1)
6. Samsung Galaxy S10+ US Edition (Model SM-G975U)
7. Samsung Galaxy S10e US Edition (Model SM-G970U)
8. Samsung Galaxy Note 10 US Edition (Models SM-N970U & SM-N970U1)
9. Samsung Galaxy Note 10+ US Edition (Models SM-N975U & SM-N975U1)
10. Samsung Galaxy S10 Canadian Edition (Model SM-G973W)
11. Samsung Galaxy S10+ Canadian Edition (Model SM-G975W)
12. Samsung Galaxy S10e Canadian Edition (Model SM-G970W)
13. Samsung Galaxy Note 10 Canadian Edition (Model SM-N970W)
14. Samsung Galaxy Note 10+ Canadian Edition (Model SM-N975W)
15. Samsung Galaxy S20
16. Samsung Galaxy S20+
17. Samsung Galaxy S20 Ultra
18. Samsung Galaxy S20 FE
19. Samsung Galaxy Note 20
20. Samsung Galaxy Note 20 Ultra
21. Samsung Galaxy Tab S6
22. Samsung Galaxy Tab S7
23. Samsung Galaxy Tab S7+
24. Samsung Galaxy S21 5G
25. Samsung Galaxy S21 Ultra 5G
26. Samsung Galaxy S21+ 5G
27. Samsung Galaxy Tab Active3
28. Samsung Galaxy Tab S8
29. Samsung Galaxy Tab S8+
30. Samsung Galaxy Tab S8 Ultra
31. Samsung Galaxy S21 FE US Edition (All Models)
32. Samsung Galaxy S21 FE (Exynos)
33. Samsung Galaxy S22
34. Samsung Galaxy S22+ (Models: SM-S906U, SM-S906U1, SM-S906W, SM-S906N, SM-S9060, SM-S906E)
35. Samsung Galaxy S22 Ultra (Models: SM-S908U, SM-S908U1, SM-S908W, SM-S908N, SM-S9080, SM-S908E)
36. Samsung Galaxy Z Fold 2
37. Samsung Galaxy Z Fold 3
38. Samsung Galaxy Z Fold 4
39. Samsung Galaxy S23
40. Samsung Galaxy S23+
41. Samsung Galaxy S23 Ultra

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

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.

Google Devices

Use of the Butterfly iQ with USB-C connectivity with the Google Pixel requires Android version 10 or newer.
1. Google Pixel 3
2. Google Pixel 3 XL
3. Google Pixel 4
4. Google Pixel 4 XL
5. Google Pixel 6
6. Google Pixel 6 Pro
7. Google Pixel 6a
8. Google Pixel 7
9. Google Pixel 7 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.

1. OnePlus 7T
2. OnePlus 7T Pro
3. OnePlus 7
4. OnePlus 7 Pro
5. OnePlus 8
6. OnePlus 8 Pro
7. OnePlus 8T
8. OnePlus 9
9. OnePlus 9 Pro
10. OnePlus 10 Pro
11. OnePlus 11 5G