

Harker Laptop Specifications: Upper School Hardware for 2022-23

The minimum standards outlined below are absolutes. The recommended standard is our current best estimate of what will be necessary for a high end computer user for a four year machine. Alternative selections that exceed the minimum standard are welcome.

Windows OS users should strongly consider the packages offered by [Laptop Schools](http://www.laptopschools.com) <<http://www.laptopschools.com>>. The Lenovo ThinkPads come with warranties that cover accidental damage. A fourth year of warranty coverage is also available.

Mac OS Users can take advantage of [Harker's Apple Education store](http://www.apple.com/edu/harker) at <http://www.apple.com/edu/harker>. After market insurance can also be purchased for the Apple products.

Linux OS users are welcome. There is no current suggested Linux package.

Hardware Minimum Standard:

Windows laptop	Apple laptop
i5 quad-core processor Integrated Intel chipset 256GB SSD 8GB RAM	Minimum: MacBookPro 1.4GHz quad-core Intel i5 processor 256GB SSD storage 8GB RAM
Windows 10 with all critical updates and security patches or better (no Windows Vista, Windows 2000 or Windows XP)	Mac OS 10.15 with all updates applied or better (no Mac OS older than 10.15)
(Higher standards may be required for specific curricular software)	(Higher standards may be required for specific curricular software)
802.11 b/g/n Wireless Network Connection	802.11 b/g/n Wireless Network Connection
USB 2.0 (or greater) port or adapter Please bear in mind that newer-model devices that come with USB-C only will require an adapter (USB-C to to USB 2 or 3).	USB 2.0 (or greater) port or adapter Please bear in mind that newer-model devices that come with USB-C only will require an adapter (USB-C to to USB 2 or 3).
VGA out (or adapter to VGA or HDMI)	VGA or HDMI adapter

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Camera (webcam built-in)	Camera (all models come with built-in iSight camera)
Bluetooth capable	Bluetooth capable
Battery sufficient for 3+ hours and charger brought to school.	Battery sufficient for 3+ hours and charger brought to school.

Hardware Recommended Standard:

If you are buying a high-end new computer, a four year warranty is recommended.

Extended warranty coverage for accidental damage should also be considered.

The specifications recommended here are for a laptop that is likely to serve a student well for four years.

As long as the minimum standard noted above is met, this list should **NOT** be perceived as a requirement.

Windows laptop	Apple laptop
Intel Core i7 or better	Apple M1 chip
Windows 10 with all critical updates and security patches or better	Mac OS 12 with all updates applied
16 GB RAM	16 GB RAM
512 GB HD (SSD preferred)	512 GB HD (SSD preferred)
802.11 a/b/g/n Wireless Network Connection	802.11 a/b/g/n Wireless Network Connection
USB 3.0 port or adapter Please bear in mind that newer-model devices that come with USB-C only will require an adapter (USB-C to to USB 2 or 3).	USB 3.0 port or adapter Please bear in mind that newer-model devices that come with USB-C only will require an adapter (USB-C to to USB 2 or 3).
VGA/HDMI (may require adapter)	VGA/HDMI (requires student to provide adapter)
Camera (webcam built-in)	Camera (all models come with built-in iSight camera)
Bluetooth capable	Bluetooth capable

Additional Requirements/Options/Considerations:

Item	Source	Required/Optional
Padded Carrying Case	Many	Required
Nametag on case	Many	Required
Headset with Boom Microphone	Many	Required for foreign language
DVD-R drive (likely external)	Many	Optional
Extended Warranty	Many	Recommend 4 years for high end machines
Accidental Damage / Theft Insurance	Safeware and others	Recommended
Anti-Theft Tracking Software	LoJack for Laptops & others	Highly recommended