COMPUTER TECHNOLOGY SYLLABUS

Computer Literacy helps students develop skills necessary for using technology successfully. It provides opportunities for connecting real world issues, supporting core curricular content with student projects. Students are taught using a teacher-facilitated, instructional format. Special emphasis is placed on touch-typing skills and technology experiences (short projects).

Due to the purchase of Chromebooks at CBMS, our students will be taught how to use Chromebooks as well as Google Doc's and the cloud saving system of Google Drive. Students will be taught the responsibilities of using such web based software as well as how to utilize this software in a classroom setting. Student use will consist of Google Apps that may evolve over time.

Tennessee State Standards for Computer Technology: Literacy and Usage:

KCS Identifier	KCS K-12 CS Standard
KCS-68-1	Analyze the relationship between a device's computational components and its capabilities. [Clarification: Computing Systems include not only computers, but also cars, microwaves, smartphones, traffic lights, and flash drives.]
KCS-68-2	Justify the hardware and software chosen to accomplish a task (e.g., comparison of the features of a tablet vs. desktop, selecting which sensors and platform to use in building a robot or developing a mobile app).
KCS-68-3	Use a systematic process to identify the source of a problem within individual and connected devices (e.g., follow a troubleshooting flow diagram, make changes to software to see if hardware will work, restart device, check connections, swap in working components).
KCS-68-4	Summarize security risks associated with weak passwords, lack of encryption, insecure transactions, and persistence of data.
KCS-68-5	Simulate how information is transmitted as packets through multiple devices through the internet and mobile devices.
KCS-68-6	Provide proper attribution when code is borrowed or built upon.
KCS-68-7	Describe ethical issues that relate to computing devices and networks (e.g., equity of access, security, hacking, intellectual property, copyright, Creative Commons licensing, and plagiarism).
KCS-68-8	Describe ways in which the Internet impacts global communication and collaborating.
KCS-68-9	Explain how computer science fosters innovation and enhances nearly all careers and disciplines.

KCS-68-10	Summarize negative and positive impacts of using data and information to categorize people, predict behavior, and make recommendations based on those predictions (e.g., customizing search results or targeted advertising, based on previous browsing history, can save search time and limit options at the same time).

KCS Identifier	KCS K-12 CS Standard
KCS-68-11	Provide examples of how computational artifacts and devices impact health and wellbeing, both positively and negatively.
KCS-68-12	Design, develop, and present computational artifacts that address social problems both independently and collaboratively Redesign a computational artifact to remove barriers to universal accessibility (e.g., using captions on images, high contrast colors, and/or larger font sizes).
KCS-68-13	Revise computational models to more accurately reflect real-world systems (e.g., ecosystems, epidemics, spread of ideas).
KCS-68-14	Represent data using different encoding schemes (e.g., binary, Unicode, Morse code, shorthand, student-created codes).
KCS-68-15	Describe how different formats of stored data represent tradeoffs between quality and size. [Clarification: compare examples of music, text and/or image formats.]
KCS-68-16	Decompose a problem into parts and create solutions for each part.
KCS-68-17	Use an iterative design process (e.g., define the problem, generate ideas, build, test, and improve solutions) to solve problems, both independently and collaboratively.
KCS-68-18	Explain the processes used to collect, transform, and analyze data to solve a problem using computational tools (e.g., use an app or spreadsheet form to collect data, decide which data to use or ignore, and choose a visualization method.).

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For the CSTA Standards, the middle letter indicates the concept associated:

A= Algorithms and Programs
C= Computing Systems
D= Data Analysis
I= Impacts of Computing
N= Networks and the Internet

ASSESSMENT:

Expectations/Skills/Competencies may include:

- Touch typing at a minimum of 20 wpm 6th, 35 wpm 7th and 45 wpm 8th. (GOAL)
- Create Documents, use paragraph, and font formatting in Word, Pages, Google Apps, blog or eBook
- Implement sorting, filtering, calculations, and formulas in Excel, Numbers, or Google Sheets
- Use animations, navigations, graphic editing in PPT or Keynote or Google Slides
- Create multimedia images, websites, audio, video, eBook, animation, quiz games etc.

GRADING POLICY / RUBRICS

- Students will be graded on daily practice of typing skills. 30%
- Students will be graded on full completion of projects. 50%
- Students are graded on participation and effort 20%

GRADING SCALE

94-100 A
90-93 A
87-89 B+
84-86 B
80-83 B
77-79 C+

74-76 C
70-73 C-
<70 R

Daily effort and participation will be recorded.

GENERAL EXPECTATIONS:

Students:

Attendance Policy: Students are expected to enter class ready to participate and learn with a good attitude toward instructors and fellow students. . Students who miss class for illness or family emergencies are expected to complete the activity or assignment to receive a grade.

Classroom Policy/Procedures – Computer Literacy is essentially a performance based class like Band or Orchestra. All students are expected to participate throughout the entire class time. All CBMS Conduct rules apply in Computer Literacy class. We hope to provide an opportunity for you to share your work with your parents and the greater school community.

1) Enter quietly, login to a computer and practice typing quietly until attendance is taken and new instructions are given.
2) ALWAYS respect instructor and classmates.
3) Work TOGETHER and ALONE as appropriate.
4) DO NOT ABUSE the computer equipment and classroom (clean hands, no food, ordrinks). When you exit the room, your areas must be cleaned up. Check tables, push in chairs, paper off floor.
5) PARTICIPATE fully. Take pride in what you do.

Communication:

Please email me if you have questions, at any time, about your student's progress. I will do my best to get back to you within 24 hours.

You may contact me by e-mail:

jeffrey.morgan@knoxschools.org