



Information Technology Syllabus CHS Business Department

Contact Information: Parents may contact me by phone, email, or visiting the school.

Teacher: Mr. Brian Lewis

Email Address: brian.lewis@ccsd.us

Phone Number: (740) 702-2287 ext. 16238

Online: <http://www.ccsd.us/1/Home>

CCSD Vision Statement: The Chillicothe City School District will provide tomorrow's leaders with a high quality education by developing high expectations and positive personal relationships among students, staff, and community members.

CCSD Mission Statement: The Chillicothe City School District empowers students to learn, to lead, and to serve.

Course Description and Prerequisite(s) from Course Handbook:

This first course in the IT career field is designed to provide students with a working knowledge of computer concepts and essential skills necessary for work and communication in today's society. Students will learn safety, security, and ethical issues in computing and social networking. Students will also learn about input/output systems, computer hardware and operating systems, and office applications.

Required: 120 – 150 hours

Course Fee: Students will have the opportunity to be a part of a Career Tech Student Organization (Business Professionals of America) as part of this course. Students who choose to be a part of the program's respective Career Tech Student Organization will have opportunities to be student officers, attend leadership activities, and participate in various leadership and skill competitions. Students who wish to be a part of the program's respective Career Tech Student Organization will be required to pay the dues associated with the

organization prior to participation in activities outside the normal classroom. **\$40.00 for BPA Membership.**

Learning Targets: Defined below for clarity are the Unit Titles, Big Ideas of every Unit taught during this course, and the Essential Questions to be answered to better understand the Big Ideas. A student's ability to grasp and answer the Essential Questions will define whether or not he or she adequately learns and can apply the skills found in Big Ideas. This will ultimately define whether or not a student scores well on assessments administered for this course.

- **1st Quarter**

- **Unit I Title: Computer Usage**

- **Big Idea #1:** I can utilize proper keyboarding technique.
 - *Essential Question #1: Identify what the home keys are.*
 - *Essential Question #2: Explain why typing speed and form is important.*
 - *Essential Question #3: What is a good target speed for typing?*
- **Big Idea #2:** I can create and format documents in a correct and visually pleasing manner.
 - *Essential Question #1: Identify what can be found in a toolbar or ribbon.*
 - *Essential Question #2: Explain the importance of proper formatting in a document.*
 - *Essential Question #3: Explain what a word processor is and why knowing how to use one is important.*
- **Big Idea #3:** I can create and use spreadsheets.
 - *Essential Question #1: Explain what a spreadsheet is and how one can be used.*
 - *Essential Question #2: Explain how you add functionality to a spreadsheet.*
 - *Essential Question #3: Explain how you use conditional formatting and why it can be useful.*

- **Unit II Title: Computer Management**

- **Big Idea #1:** I can utilize common shortcuts to access program and OS features.
 - *Essential Question #1: Explain what a shortcut is.*
 - *Essential Question #2: Identify common shortcuts found in most productivity programs.*

- *Essential Question #3: Identify some of the more commonly used OS shortcuts and explain what they do.*
 - **Big Idea #2:** I can add and remove programs from a computer.
 - *Essential Question #1: Describe the difference between minimum requirements and recommended requirements.*
 - *Essential Question #2: How do you install a new program to a computer or uninstall a program?*
 - *Essential Question #3: Explain what administrative mode is and why it is significant to adding and removing programs?*
 - **Big Idea #3:** I can identify the different types of programs and use that information to learn new programs.
 - *Essential Question #1: Identify four categories of software that most programs can be classified under.*
 - *Essential Question #2: Define menus and identify which items are common across nearly all programs.*
 - *Essential Question #3: Explain the difference between a window and a docking panel.*
- **2nd Quarter**
 - **Unit III Title: Operating Systems**
 - **Big Idea #1:** I can name the most common operating systems and identify their strengths and weaknesses.
 - *Essential Question #1: What are the most common operating systems in use?*
 - *Essential Question #2: Identify the advantages of the most common operating systems.*
 - *Essential Question #3: Identify the disadvantages of the most common operating systems.*
 - **Big Idea #2:** I can install operating systems.
 - *Essential Question #1: What forms of media can be used to install an operating system?*
 - *Essential Question #2: What is the BIOS and how does it relate to OS installation?*
 - *Essential Question #3: Describe what partitions are and explain how they relate to operating system installation.*

- **Big Idea #3:** I can use the operating system's features to be ADA compliant.
 - *Essential Question #1: Explain what ADA is and why it is important.*
 - *Essential Question #2: Identify what assistive features are standard in Windows.*
 - *Essential Question #3: What is safe mode and how can it assist in recovering from improper implementation of assistive features?*
 - **Unit IV Title: Computer Maintenance and Assembly**
 - **Big Idea #1:** I can follow safe work habits to avoid injury to myself or damage to equipment.
 - *Essential Question #1: Define ESD and explain what it can do to computer components.*
 - *Essential Question #2: Why is it important to keep devices clean and how do you do it safely?*
 - *Essential Question #3: Which part of the computer should you never open or modify?*
 - **Big Idea #2:** I can identify various peripherals and explain what they are used for.
 - *Essential Question #1: Identify the common peripherals found on most computers and explain what they are used for.*
 - *Essential Question #2: Explain what accessibility means and why it is important in peripheral selection.*
 - *Essential Question #3: Describe the difference between input devices and output devices.*
 - **Big Idea #3:** I can identify the various connector types and explain what they are used for.
 - *Essential Question #1: What is an IO shield and what can typically be found at an IO shield?*
 - *Essential Question #2: Define USB and explain what it is used for.*
 - *Essential Question #3: Identify common video and audio connector types and describe their advantages.*
- **MID-TERM EXAM**
- **3rd Quarter**
 - **Unit V Title: Computer Components and Build**

- **Big Idea #1:** I can identify and install the standard computer components and while explaining what they do.
 - *Essential Question #1: What components are used to regulate heat generated from devices?*
 - *Essential Question #2: Distinguish between motherboards and daughterboards and identify what they do.*
 - *Essential Question #3: What types of RAM are available for use in devices?*
- **Big Idea #2:** I can use non-standard components in building a PC and explain what they do.
 - *Essential Question #1: Identify the most common types of long term storage and explain how they work.*
 - *Essential Question #2: Identify older standards for long term storage and explain how they are different from modern standards.*
 - *Essential Question #3: What optional components are typically connected to a motherboard?*
- **Big Idea #3:** I can assemble computers using the components and peripherals selected.
 - *Essential Question #1: Who are the major processor manufacturers and why is processor type significant?*
 - *Essential Question #2: Explain why brand matters when selecting components.*
 - *Essential Question #3: Describe the sequence that you would use to assemble a computer.*
- **Unit VI Title: Communications**
 - **Big Idea #1:** I can identify the different types of networks.
 - *Essential Question #1: Describe and differentiate between LAN, WAN, WLAN, and VLAN.*
 - *Essential Question #2: Define SOHO and explain how you would use it.*
 - *Essential Question #3: Describe the relationship between a client and a server.*
 - **Big Idea #2:** I can connect devices to a network.
 - *Essential Question #1: What does SSID mean and explain what it is used for.*
 - *Essential Question #2: Explain what encryption keys are and what they are used for.*

- *Essential Question #3: What is a network extender and explain why you would use one.*
 - **Big Idea #3:** I can share information and devices across a network.
 - *Essential Question #1: Describe the process of setting up a shared directory.*
 - *Essential Question #2: What types of devices might be shared across a network?*
 - *Essential Question #3: Explain why you might restrict access to shared devices and directories.*
- **4th Quarter**
 - **Unit VII Title: Support**
 - **Big Idea #1:** I can keep my computer and network safe from threats.
 - *Essential Question #1: Describe five common forms of malware.*
 - *Essential Question #2: What practices can be followed to prevent or remove malware?*
 - *Essential Question #3: What are three common ways to become infected with malware?*
 - **Big Idea #2:** I can document and report bugs and other issues with system usage.
 - *Essential Question #1: How do you create a screen capture?*
 - *Essential Question #2: Why would you use remote desktop connections?*
 - *Essential Question #3: What information should be contained in a bug report?*
 - **Big Idea #3:** I can overcome catastrophic system failures.
 - *Essential Question #1: How do you backup and restore an operating system?*
 - *Essential Question #2: How can data be recovered from a faulty drive?*
 - *Essential Question #3: Why is 'Have you turned it off and back on again?' a standard first question for recovering from system failures?*
 - **Unit VIII Title: Pathway Exploration**
 - **Big Idea #1:** I can write a simple program.
 - *Essential Question #1: What is a function?*
 - *Essential Question #2: What is a variable?*
 - *Essential Question #3: What is a condition?*
 - **Big Idea #2:** I can create CGI Media.
 - *Essential Question #1: What is digital media?*

- *Essential Question #2: What are common programs for editing images?*
- *Essential Question #3: What is 3d modeling?*
- **Big Idea #3:** I can make a website.
 - *Essential Question #1: What is HTML?*
 - *Essential Question #2: What is CSS?*
 - *Essential Question #3: How do HTML and CSS work together to make a website?*
- **END OF COURSE EXAM**

Course Materials:

- Google Chromebook
- Flash Drive, 16 GB or greater (Optional)

Textbook:

- Comptia IT fundamentals eBook
- Discovering Computers: Technology in a World of Computers, Mobile Devices, and the Internet. Shelly Cashman Series. Vermaat. Sebok. Freund. 2014. (978-1-285-16176-1)

Electronic Resources:

- <https://www.professormesser.com/>

Course Expectations:

- **Respect your fellow classmates and community.** We practice unconditional positive regard in the classroom.
- **Obey all faculty instructions.**
- **Follow along with lessons during lecture time.** Not paying attention robs yourself and those around you of time for questions and clarifications which goes back to the first item, be respectful.
- **Don't be afraid to be wrong,** especially during lecture/discussion time. The best lectures and usually most rewarding lectures happen when you're brave enough to give an answer that may not be right. This opens up opportunity to learn more and shows that you're taking the time to think about the course content.
- **Complete your classroom projects on time and in the classroom** (they all build upon each other). There will be plenty of opportunity to complete in class work in class. If you have the ability to work on projects at home, then more power to you, but that does not excuse you from using the classroom time to work.

- **Begin work on bell ringers before the bell rings** and have try to finish it before attendance is complete. You may use Google to help find the answer for bell ringers. This is a tech class and the answers tend to change over the course of a few short years so it's more important that you know how to find and apply the answers than memorizing the answers.
- **Do not give textbook definitions.** Tell us what the definition actually means in your own words. If you provide a textbook definition during discussions, you will be asked to explain your definition as they tend to carry little meaning to most people.
- Respect the lab. **Do not deface or damage any equipment or furniture within it.** Not only is it criminal, but as you are NOT the only person using the equipment, it is disrespectful to the other students. This also means that you should make sure to keep your workspace clean and orderly.

Grading:

Unit Exams	50%
Assessments (Including: Quizzes, Essays, Labs, and Projects)	30%
Class work/Homework	20%

- Each nine week's grade comprises 20% of a student's final grade.
- The Mid-Term Exam and End of Course Exam each comprise 10% of a student's final grade.

Grading Scale:

The grading scale for Chillicothe High School can be found in the student handbook or online at

<http://www.chillicothe.k12.oh.us/1/Content2/studenthandbook>.

Late Work: Late work will be subject to the Board-adopted policy on assignments that are submitted late (to be reviewed in class).

- Regardless of the absence type (excused, unexcused, OSS, etc.), students are expected to make up work and be held accountable for learning all material they missed.
- Any student who is absent from school will receive one (1) additional day for every day he/she missed to make up his/her work for full credit (100%).
- Any student who exceeds the allotted time to turn in an assignment for full credit may still submit work late for partial credit.
 - Any student who turns in work up to 1 week late must at least be given the opportunity to earn 75% on that assignment.

- Any student who turns in work between 1 and 2 weeks late must at least be given the opportunity to earn 60% on that assignment.
- The end of the 9 weeks is the cut off point for teachers to accept late work from students for full or partial credit unless the teacher decides to give the student an incomplete for the 9 weeks due to extenuating circumstances.

Performance Based Section: Writing Assignments/Exams/Presentations/Technology

One or more of the End of Unit Exams may be Performance Based. According to the Ohio Department of Education, "Performance Based Assessments (PBA) provides authentic ways for students to demonstrate and apply their understanding of the content and skills within the standards. The performance based assessments will provide formative and summative information to inform instructional decision-making and help students move forward on their trajectory of learning." Some examples of Performance Based Assessments include but are not limited to portfolios, experiments, group projects, demonstrations, essays, and presentations.

CHS Information Technology Course Syllabus

After you have reviewed the preceding packet of information with your parent(s) or guardian(s), please sign this sheet and return it to me so that I can verify you understand what I expect out of each and every one of my students.

Student Name (please print):

Student Signature:

Parent/Guardian Name (please print):

Parent/Guardian Signature:

Date:
