

Computer Hardware & Systems Support

2020-2021

Grades 10-11

Prerequisite(s): Introduction to Information Technology

Welcome to Computer Hardware & Systems Support. This year's long course meets the standards for one elective credit towards graduation. Successful completion of this course will allow you to continue taking the remaining two ITA sequenced courses: **Computer Programming and Advanced Computers** (*MCC, Dual Enrollment*).

****Scholars who take all four ITA accredited courses, Career and Financial Management, and meet the testing and WBL requirements will receive a NYS CTE Diploma.****

Instructor: Mr. Trent Russell

Contact Information:

Email: trent.russell@rcsdk12.org
or 2013690@rcsd121.org

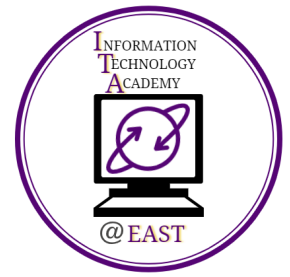
Phone: Cell (585) 286-5104
(School) (585) 288-3130 ext. 5116

Course Description

This course is a project/lab based course designed to introduce you to computer hardware and computer systems support or what is known as Technical Support.

Computer Hardware: Support for all types of computers" PC's, Laptops, Chromebooks, iPads, Tablets and all other handheld mobile devices has evolved into one of the largest professional service industries in the world. Because of this growth, there is a demand for skilled technicians to maintain, support, and upgrade these devices.

Computer System Support: Computer systems today are essentially reliable. While computers still do occasionally fail because of a faulty component (part) the majority of the problems in a computer system are due to software issues or are caused by the computer users themselves. The IT Support workplace now demands skilled technicians who can diagnose software or user generated problems and reach a solution quickly and securely



Course Units/Objectives

This course is broken into 4 units:

- 1. Behind the PC:**
Review the computer systems and how it comes all together. We discuss from the very beginning Bits, Bytes, Binary Code, the hardware components and computer types.
- 2. Computer Systems Setup & Support:**
Students will be able to research, purchase, build, repair and/or support a variety of electronic computing devices in a work setting or in their personal life; understanding that to be knowledgeable about basic computer troubleshooting you have to be knowledgeable about computer hardware and software.
- 3. Introduction to Computer Networking:**
Students will recognize that computer networking is constantly transforming as new devices are developed; enabling an ever increasing connection of people, devices, and information. The ability to understand, maintain, upgrade, and troubleshoot networks is the best to avoid hackers, viruses, and connection headaches while protecting their equipment, personal and financial information.
- 4. Mobile Computing:**
Students will explore mobile devices, the support systems and how many computer systems are transferring to them. Students will explore how mobile devices work, and develop skills to repair them.

Grading Policy

Assessments

Curriculum Embedded Perform Tasks (CEPTS) 50%

Projects 30%

Other Work

Classwork 10%

Class Participation 10%

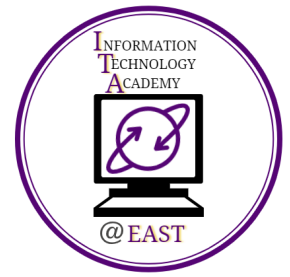
Classroom Materials

Online:

Chromebook/MiFi

In Class:

Writing materials: Pen/Pencil/Paper



Classroom (Workplace) Expectations

#1 Be Accountable & Reliable: Be at work(class) for every shift and on time. If you cannot make it, let your supervisor (teacher) know ahead of time. Come to work (class) prepared to do the work you are asked to do, in the time you are given. **BE A TEAM PLAYER** when working with other employees (classmates) do not expect them to do all the work when it is a team effort so that you are seen as a reliable employee (scholar)

#2 Be Action Oriented-Tenacious & Proactive: Participate in the work. When you do not understand the work as a co-worker (classmate) or your boss (teacher) as soon as possible. Stay awake and focused on the job (learning). If there is a chance to show what you are capable of to yourself, your teammates or your boss (teacher) do not hesitate to show off your abilities (actively participate in the class) being proactive is how a part of your promotions & raises are determined (grades).

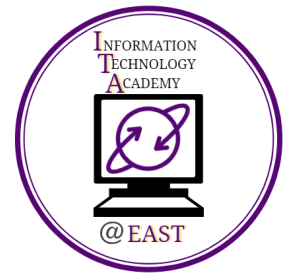
#3 Be Attitude Positive & Ethical: Do your work without complaining; even when it is not what you may like to do. Be honest even when you make a mistake (mistakes happen), accept the consequences of your mistakes with grace. If a coworker (classmate) makes a mistake, be helpful not hurtful. Follow the electronics policy - no personal phones or other electronics while on the clock (in class) - it is unethical to be getting paid for work you are not doing, and eventually can cause serious harm to your advancement at work (grades). Do NOT take credit for someone else's work; either a co-worker (classmate) or information you got off of the Internet. In the world of work doing the right thing never is the wrong thing and can save you from getting let go.

4 Be Appropriate & Respectful: If what you are about to say/write or do to another employee (classmate) or your supervisor (teacher) would get you fired the DON'T do/say or write it. Think before you speak

Communication Policy

When you have questions for me, please use the following guidelines so that class time is maximized:

- ➔ **Office Hours are from 1:45 to 3:30 on ZOOM Wednesdays** please feel free to come during that time for any concerns , questions or help you may need (*link is in the Google Classroom*)
- **Questions about assignments** that come up **outside the class time or Office Hours** should be posted in the Q & A for that week's assignment and I will get back with a reply as soon as possible. Scholars should also check the Q & A first, as another scholar may have already asked and an answer was given.
- *If you missed the class, it is your responsibility to read the Week at a Glance, go through the Google Class Slides to get caught up on the work you missed - BEFORE - contacting the teacher*



- **Questions about technology** needs or problems will be handled through the process setup for the whole school contact Andrea Zurlo at 2004943@rcsdk12.org
- **Personal matters** should be discussed with the teacher through email or if it is something you do not want to write about, then email that and request a time will be set up for us to speak over the phone.

Parent/Guardians

Parents/Guardians are an integral part of each and every scholar's success. I work for you and your son/daughter so please do not hesitate to reach out to:

- Check on your scholar's progress/attendance
- Ask questions about assigned work
- Let me know if your scholar will be missing from class do to illness or other family issues
- Or if you need help on something related to their future: college, training, work papers, etc.

Please reach out to me as well if there are additional ways you can be reached - the more ways we have to stay in touch with each other the more successful we will be in helping your son/daughter in their learning.