COURSE SYLLABUS

LAST REVIEW   Fall 2022

COURSE TITLE   Printers, Scanners, and Peripherals

COURSE NUMBER   CRTE 0110

DIVISION   Career and Technical Education

DEPARTMENT   CRTE

CIP CODE   11.1006

CREDIT HOURS   3

CONTACT HOURS/WEEK Class: 1   Lab: 4

PREREQUISITES   None

COURSE DESCRIPTION

This class will provide the student with essential information about printers and scanners. Students will learn how printers operate, what to consider when purchasing a printer, and how to connect printers to an individual computer or to a network. Students will also be expected to describe the types of printers currently available. Describe the installation and configuration process for printers. Describe the types of scanners currently available. Describe the installation and configuration process for scanners. Identify and apply common preventive maintenance techniques for printers and scanners and be able to effectively and efficiently troubleshoot printers and scanners. You will learn how to maintain, install, and repair these devices in both local and network configurations. This course discusses safety hazards, configuration procedures, preventive maintenance, and printer and scanner sharing. After completing this chapter, you will meet these objectives: Describe how to share a printer and a scanner on a network. Upgrade and configure printers and scanners. Describe printer and scanner preventive maintenance techniques. Troubleshoot printers and scanners.

PROGRAM ALIGNMENT

This course is part of a program aligned through the Kansas Board of Regents and Technical Education Authority. For more information, please visit:
https://kansasregents.org/workforce_development/program-alignment

PROGRAM LEARNING OUTCOMES

1. Students will be able to identify different types of PC hardware and peripherals
2. Students will be able to evaluate operating systems, application programs, and hardware.
3. Students will be able to demonstrate troubleshooting and repair personal computers.
4. Students will be able to demonstrate appropriate customer skills when interacting with customers.

TEXTBOOKS

http://kckccbookstore.com/

METHODS OF INSTRUCTION
A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE
I.   Describe the types of printers currently available
   A.   Describe characteristics and capabilities of printers
   B.   Describe printer to computer interfaces
   C.   Describe laser printers
   D.   Describe impact printers
   E.   Describe inkjet printers
   F.   Describe solid-ink printers
   G.   Describe other printer types
II.   Describe the installation and configuration process for printers
   A.   Describe how to set up a printer
   B.   Explain how to power and connect the device using a local or network port
   C.   Describe how to install and update the device driver, firmware, and RAM
   D.   Identify configuration options and default settings
   E.   Describe how to optimize printer performance
   F.   Describe how to print a test page
   F.   Describe how to share a printer
III.   Describe the types of scanners currently available
   A.   Describe scanner types, resolution, and interfaces
   B.   Describe all-in-one devices
   C.   Describe flatbed scanners
   D.   Describe hand-held scanners
   E.   Describe drum scanners
IV.   Describe the installation and configuration process for scanners
   A.   Explain how to power and connect a scanner
   B.   Describe how to install and update the device driver
   C.   Identify configuration options and default settings
   D.   Identify and apply common preventive maintenance techniques for printers and scanners
V.   Troubleshoot printers and scanners
   A.   Review the troubleshooting process
   B.   Identify common problems and solutions
VI.   Install and configure a local printer and scanner
   A.   Connect the device to a local port
   B.   Install and configure the driver and software
   C.   Configure options and default settings
   D.   Verify functionality
VII.   Describe how to share a printer and a scanner on a network
   A.   Describe types of print servers
   B.   Describe how to install network printer software and drivers on a computer
VIII.   Upgrade and configure printers and scanners
   A.   Describe printer upgrades

      B.   Describe scanner optimization
IX.   Describe printer and scanner preventive maintenance techniques
      A.   Determine scheduled maintenance according to vendor guidelines
      B.   Describe a suitable environment for printers and scanners
      C.   Describe cleaning methods
      D.   Describe checking capacity of ink cartridges and toners
XI.   Remote Technician: Fix a Printer Problem

COURSE LEARNING OUTCOMES AND COMPETENCIES
Upon successful completion of this course, the student will:

A.   Describe the types of printers currently available.
    1.   Describe the characteristics and capabilities of printers.
    2.   Describe printer to computer interfaces.
    3.   Describe laser printers.
    4.   Describe impact printers.
    5.   Describe ink jet printers.
    6.   Describe solid-ink printers.
    7.   Describe other printer types.

B.   Describe the installation and configuration process for printers.
    8.   Describe how to set up a printer.
    9.   Explain how to power and connect the device using a local or network port.
    10. Describe how to install and update the device driver, firmware, and RAM.
    11. Identify configuration options and default settings.
    12. Describe how to optimize printer performance.
    13. Describe how to print a test page.
    14. Describe how to share a printer.

C.   Describe the types of scanners currently available.
    15. Describe scanner types, resolution, and interfaces.
    16. Describe all-in-one devices.
    17. Describe flatbed scanners.
    18. Describe hand-held scanners.
    19. Describe drum scanners.

D.   Demonstrate the installation and configuration process for scanners.
    20. Explain how to power and connect a scanner.
    21. Describe how to install and update the device driver.
    22. Identify configuration options and default settings.

E.   Troubleshoot printers and scanners.
    23. Demonstrate the ability to describe the troubleshooting process.
    24. Identify common problems and offer appropriate solutions.

F.   Demonstrate how to install a local printer and scanner.

25. Connect the device to a local port.
26. Install and configure the driver and software.
27. Configure options and default settings.
28. Verify functionality.

G. Describe how to share a printer and scanner on a network.
    29. Describe types of print servers.
    30. Describe how to install network printer software and drivers on a computer.

H. Describe how to upgrade and configure printers and scanners.
    31. Demonstrate the ability to upgrade a printer.
    32. Demonstrate the ability to optimize a scanner.

I. Describe printer and scanner preventive maintenance techniques.
    33. Determine scheduled maintenance according to vendor guidelines.
    34. Describe a suitable environment for printers and scanners.
    35. Describe cleaning methods.
    36. Describe checking capacity of ink cartridges and toners.

J. Describe how to fix a printer remotely.
    37. Demonstrate the ability to configure a printer via remote technology.

ASSESSMENT OF COURSE LEARNING OUTCOMES AND COMPETENCIES
Student progress is evaluated through both formative and summative assessment methods.
Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES
Student Handbook
https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf

College Catalog
https://www.kckcc.edu/academics/catalog/index.html

College Policies and Statements
https://www.kckcc.edu/about/policies-statements/index.html

Accessibility and Accommodations
https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html.