SYLLABUS

DATE OF LAST REVIEW: 02/2013
CIP CODE: 47.0104
SEMESTER: DEPARTMENTAL SYLLABUS
COURSE TITLE: Printers and Scanners for PC Technicians
COURSE NUMBER: CRTE0110
CREDIT HOURS: 3
INSTRUCTOR: DEPARTMENTAL SYLLABUS
OFFICE LOCATION: DEPARTMENTAL SYLLABUS
OFFICE HOURS: DEPARTMENTAL SYLLABUS
TELEPHONE: DEPARTMENTAL SYLLABUS
EMAIL: KCKCC issued email accounts are the official means for electronically communicating with our students.
PREREQUISITE(S): CRTE0108 Laptops and Portable Devices for PC Technicians

REQUIRED TEXT AND MATERIALS:
Please check with the KCKCC bookstore, http://www.kckccbookstore.com/, for the required texts for your particular class.

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.

METHOD 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, and 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

EXPECTED LEARNER OUTCOMES:
A. The learner will be able to describe the types of printers currently available.
B. The learner will be able to describe the installation and configuration process for printers.
C. The learner will be able to describe the types of scanners currently available.
D. The learner will be able to demonstrate the installation and configuration process for scanners.
E. The learner will be able to troubleshoot printers and scanners.
F. The learner will be able to demonstrate how to install a local printer and scanner.
G. The learner will be able to describe how to share a printer and scanner on a network.
H. The learner will be able to describe how to upgrade and configure printers and scanners.
I. The learner will be able to describe printer and scanner preventive maintenance techniques.
J. The learner will be able to describe how to fix a printer remotely.

COURSE COMPETENCIES:

The learner will be able to describe the types of printers currently available.
1. The learner will be able to describe the characteristics and capabilities of printers.
2. The learner will be able to describe printer to computer interfaces.
3. The learner will be able to describe laser printers.
4. The learner will be able to describe impact printers.
5. The learner will be able to describe ink jet printers.
6. The learner will be able to describe solid-ink printers.
7. The learner will be able to describe other printer types.

The learner will be able to describe the installation and configuration process for printers.
8. The learner will be able to describe how to set up a printer.
9. The learner will be able to Explain how to power and connect the device using a local or network port.
10. The learner will be able to describe how to install and update the device driver, firmware,
and RAM.

11. The learner will be able to identify configuration options and default settings.
12. The learner will be able to describe how to optimize printer performance.
13. The learner will be able to describe how to print a test page.
14. The learner will be able to describe how to share a printer.

The learner will be able to describe the types of scanners currently available.

15. The learner will be able to describe scanner types, resolution, and interfaces.
16. The learner will be able to describe all-in-one devices.
17. The learner will be able to describe flatbed scanners.
18. The learner will be able to describe hand held scanners.
19. The learner will be able to describe drum scanners.

The learner will be able to demonstrate the installation and configuration process for scanners.

20. The learner will be able to explain how to power and connect a scanner.
21. The learner will be able to describe how to install and update the device driver.
22. The learner will be able to identify configuration options and default settings.

The learner will be able to troubleshoot printers and scanners.

23. The learner will be able to demonstrate the ability to describe the troubleshooting process.
24. The learner will be able to identify common problems and offer appropriate solutions.

The learner will be able to demonstrate how to install a local printer and scanner.

25. The learner will be able to connect the device to a local port.
26. The learner will be able to install and configure the driver and software.
27. The learner will be able to configure options and default settings.
28. The learner will be able to verify functionality.

The learner will be able to describe how to share a printer and scanner on a network.

29. The learner will be able to describe types of print servers.
30. The learner will be able to describe how to install network printer software and drivers on a computer.

The learner will be able to describe how to upgrade and configure printers and scanners.

31. The learner will be able to demonstrate the ability to upgrade a printer.
32. The learner will be able to demonstrate the ability to optimize a scanner.

The learner will be able to describe printer and scanner preventive maintenance techniques.

33. The learner will be able to determine scheduled maintenance according to vendor guidelines.
34. The learner will be able to describe a suitable environment for printers and scanners.
35. The learner will be able to describe cleaning methods.
36. The learner will be able to describe checking capacity of ink cartridges and toners.

The learner will be able to describe how to fix a printer remotely.
37. The learner will be able to demonstrate the ability to fix a printer via remote technology.

**ASSESSMENT OF LEARNER OUTCOMES:**
Student progress is evaluated by means that include, but are not limited to, exams, written assignments, and class participation.

**SPECIAL NOTES:**
This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student’s progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.

Kansas City Kansas Community College offers equal educational opportunity to all students as well as serving as an equal opportunity employer for all personnel. Various laws, including Title IX of the Educational Amendments of 1972, require the college’s policy on non-discrimination be administered without regard to race, color, age, sex, religion, national origin, physical handicap, or veteran status and that such policy be made known.

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