SYLLABUS

LAST DATE OF REVIEW: 02/2013

CIP CODE: 47.0101

SEMESTER: DEPARTMENTAL SYLLABUS

COURSE TITLE: Advanced Topics and Customer Skills for PC Technicians

COURSE NUMBER: CRTE0116

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): CRT-0114 Security 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 discuss the students potential career as a technician, your ability to determine if a component for a customer's computer should be upgraded or replaced. It is important that you develop advanced skills in installation procedures, troubleshooting techniques, and diagnostic methods for computers. This course discusses the importance of component compatibility across hardware and software. It also covers the need for adequate system resources to efficiently run the customer's hardware and software. After completing this course, you will meet these objectives: Give an overview of field, remote, and bench technician jobs. Explain safe lab procedures and tool use. Describe situations requiring replacement of computer components. Upgrade and configure personal computer components and peripherals. Identify and apply common preventive maintenance techniques for personal computer components. Troubleshoot computer components and...
peripherals. This class will discuss the relationship between communication skills and troubleshooting? As a computer technician, you will not only fix computers but will also interact with people. In fact, troubleshooting is as much about communicating with the customer as it is about knowing how to fix a computer. In this class, you will learn to use good communication skills as confidently as you use a screwdriver.

**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. Give an overview of field, remote, and bench technician jobs
II. Explain safe lab procedures and tool use
   A. Review safe working environments and procedures
   B. Review names, purposes, characteristics, and safe and appropriate use of tools
   C. Identify potential safety hazards and implement proper safety procedures for computer components
   D. Describe environmental issues
III. Describe situations requiring replacement of computer components
   A. Select a case and power supply
   B. Select a motherboard
   C. Select the CPU and heat sink/fan assembly
   D. Select RAM
   E. Select adapter cards
   F. Select storage devices and hard drives
   G. Select input and output devices
IV. Upgrade and configure personal computer components and peripherals
   A. Upgrade and configure a motherboard
   B. Upgrade and configure a CPU and a heat sink/fan assembly
   C. Upgrade and configure RAM
   D. Upgrade and configure BIOS
   E. Upgrade and configure storage devices and hard drives
   F. Upgrade and configure input and output devices
V. Identify and apply common preventive maintenance techniques for personal computer components
   A. Clean internal components
   B. Clean the case
   C. Inspect computer components
VI. Troubleshoot computer components and peripherals
   A. Review the troubleshooting process
B. Identify common problems and solutions
C. Apply troubleshooting skills

VII. Explain the relationship between communication and troubleshooting

VIII. Describe good communication skills and professional behavior
A. Determine the computer problem of the customer
B. Display professional behavior with the customer
C. Focus the customer on the problem during the call
D. Use proper netiquette
E. Implement time and stress management techniques
F. Observe Service Level Agreements (SLAs)
G. Follow business policies

IX. Explain ethics and legal aspects of working with computer technology

X. Describe call center environment and technician responsibilities
A. Describe the call center environment
B. Describe level-one technician responsibilities

XI. Describe level-two technician responsibilities

EXPECTED LEARNER OUTCOMES:
A. The learner will be able to compare and contrast Field, Remote and Bench Technician Jobs
B. The learner will be able to explain safe lab procedures and tool use
C. The learner will be able to describe situations requiring replacement of computer components
D. The learner will be able to upgrade and configure personal computer components and peripherals
E. The learner will be able to identify and apply common preventive maintenance techniques for personal computer components
F. The learner will be able to troubleshoot personal computer components and peripherals
G. The learner will be able to explain the relationship between communication and troubleshooting
H. The learner will be able to describe good communication skills and professional behavior
I. The learner will be able to explain ethics and legal aspects involved in working with computer technology
J. The learner will be able to describe the call center environment and technician responsibilities

COURSE COMPETENCIES:

The learner will be able to compare and contrast Field, Remote and Bench Technician Jobs
1. The learner will be able to explain the differences between a Field, Remote and Bench Technician.

The learner will be able to explain safe lab procedures and tool use
2. The learner will be able to review safe working environments and procedures
3. The learner will be able to review names, purposes, characteristics, and safe and appropriate use of tools
4. The learner will be able to identify potential safety hazards and implement proper safety procedures for computer components
5. The learner will be able to describe environmental issues

_The learner will be able to describe situations requiring replacement of computer components_
6. The learner will be able to select a case and power supply
7. The learner will be able to select a motherboard
8. The learner will be able to select the CPU and heat sink/fan assembly
9. The learner will be able to select RAM
10. The learner will be able to select adapter cards
11. The learner will be able to select storage devices and hard drives
12. The learner will be able to select input and output devices

_The learner will be able to upgrade and configure personal computer components and peripherals_
13. The learner will be able to upgrade and configure a motherboard
14. The learner will be able to upgrade and configure a CPU and a heat sink/fan assembly
15. The learner will be able to upgrade and configure RAM
16. The learner will be able to upgrade and configure BIOS
17. The learner will be able to upgrade and configure storage devices and hard drives
18. The learner will be able to upgrade and configure input and output devices

_The learner will be able to identify and apply common preventive maintenance techniques for personal computer components_
19. The learner will be able to clean internal components
20. The learner will be able to clean the case
21. The learner will be able to inspect computer components

_The learner will be able to troubleshoot personal computer components and peripherals_
22. The learner will be able to review the troubleshooting process
23. The learner will be able to identify common problems and solutions
24. The learner will be able to apply troubleshooting skills

_The learner will be able to explain the relationship between communication and troubleshooting_
25. The learner will be able to demonstrate the ability to explain the relationship between communication and troubleshooting.

_The learner will be able to describe good communication skills and professional behavior_
26. The learner will be able to determine the computer problem of the customer
27. The learner will be able to display professional behavior with the customer
28. The learner will be able to focus the customer on the problem during the call
29. The learner will be able to use proper netiquette
30. The learner will be able to implement time and stress management techniques
31. The learner will be able to observe Service Level Agreements (SLAs)
32. The learner will be able to follow business policies
   *The learner will be able to explain ethics and legal aspects involved in working with computer technology*
33. The learner will be able to explain ethical and legal aspects of working with computer technology
   *The learner will be able to describe the call center environment and technician responsibilities*
34. The learner will be able to describe the call center environment
35. The learner will be able to describe level-one technician responsibilities

**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.

Kansas City Kansas Community College complies with the Americans with Disabilities Act. If you need accommodations due to a documented disability, please contact the Director of the Academic Resource Center in Rm. 3354 or call (913) 288-7670.