DATE OF LAST REVIEW: 02/2013

CIP CODE: 15.1201

SEMESTER: Departmental Syllabus

COURSE TITLE: Home Computer Repair/Maintenance

COURSE NUMBER: CIST0214

CREDIT HOURS: 4

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): CIST-0143 Computer Operating System: (Windows XP) or CIST-0145 Computer Operating System: (VISTA) or CIST-0147 Computer Operating System: (Windows 7)

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 course is specially designed as an introductory course in computers and their hardware systems. Students will learn about motherboards, power supplies, memory, ports, video, storage devices, and maintaining the operating system.

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, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE:
I. Motherboards
A. Identifying motherboards
B. Research for manuals
C. Components on the motherboard
D. Installing a motherboard
E. Identify the CMOS chip/version
F. Motherboard CMOS setup

II. Supporting Windows OS
A. Installing Windows
B. Configuring Windows
C. Monitoring System Performance
D. Hardware Installations
E. Windows Registry
F. Computer auditing software
G. Troubleshooting

III. Memory
A. History of memory
B. Types of memory
C. Installing memory
D. Troubleshooting memory

IV. Power Supply
A. Construction of Power Supply’s
B. Identifying Power Supply connectors
C. Required Power Supply needs
D. Installing the Power Supply

V. Storage Devices
A. Hard Drives.
B. Optical Drives.
C. Partitioning and formatting a drive.

VI. Purchasing a PC or Building your Own
A. Selecting a personal Computer to meet your needs.
B. Preparing to Build a PC.
C. Building your own PC
D. Setting up the CMOS
E. POST information

VII. Networking
A. An overview of Networks.
B. Identifying the type of Network
C. Finding your Network Drivers

VII. Viruses, Disaster Recovery, and Maintenance Plan
A. Viruses and Other Computer Infestations
B. Preventive Maintenance
C. Drive Backup

IX. Troubleshooting
A. Motherboards
B. Memory
C. Power Supply
D. Storage Devices

X. New Advances

EXPECTED LEARNER OUTCOMES:
A. The student will be able to describe different types of Motherboards
B. The student will be able to install an Operating System
C. The student will be able to identify different types of memory.
D. The student will be able to identify components of a motherboard.
E. The student will be able to explain the construction of a power supply.
F. The student will be able to describe the different types of hard drives.
G. The student will be able to identify the different types of optical drives.
H. The student will be able to explain the steps of purchasing a computer system.
I. The student will be able to explain the steps of building a PC.
J. The student will be able to summarize a network.
K. The student will be able to research for antivirus software.
L. The student will be able to distinguish systemic methods of troubleshooting the computer.

COURSE COMPETENCIES:
Upon successful completion of this course:
The student will be able to describe different types of Motherboards.
1. The student will be able to describe different types of motherboards.
2. The student will be able to identify and research for motherboard manuals
3. The student will be able to enter the setup program and make basic changes.
The student will be able to install an Operating System.
4. The student will be able to install an operating system.
5. The student will be able to identify the system requirements of an operating system.
6. The student will be able to use computer auditing software on the operating system.
7. The student will be able to monitor system performance.
8. The student will be able to backup the registry
The student will be able to identify different types of memory.
9. The student will be able to identify different types of memory.
10. The student will be able to install system memory.
11. The student will be able to run simple memory diagnostic software.
The student will be able to identify components of a motherboard.
12. The student will be able to identify the components of a motherboard reinforcement.
13. The student will be able to describe the uses of the components on the motherboard.
The student will be able to explain the construction of a power supply.
14. The student will be able to explain the construction of a power supply.
15. The student will be able to identify power supply connectors.
16. The student will be able to estimate the requirements of the power supply
17. The student will be able to install a power supply.
The student will be able to describe the different types of hard drives.
18. The student will be able to describe the different types of hard drives.
19. The student will be able to partition and format a drive.
20. The student will be able to install a drive.
The student will be able to identify the different types of optical drives.
21. The student will be able to identify the different types of optical drives.
22. The student will be able to install an optical drive.
The student will be able to explain the steps of purchasing a computer system.
23. The student will be able to explain the steps of purchasing a computer system.
24. The student will be able to research the components for a computer system.
25. The student will be able to calculate the estimated cost of a computer system.
The student will be able to explain the steps of building a PC.
26. The student will be able to explain the steps of building a PC.
27. The student will be able to build a basic computer system
28. The student will be able to identify the different information displayed in POST.
29. The student will be able to set up the CMOS.
The student will be able to summarize a network.
30. The student will be able to summarize a network.
31. The student will be able to identify the components of a network.
32. The student will be able to research for the drivers needed by a network.
The student will be able to research for antivirus software.
33. The student will be able to research for antivirus software.
34. The student will be able to run antivirus software.
35. The student will be able to backup a computer system.
36. The student will be able to describe basic computer preventive maintenance.
The student will be able to distinguish systemic methods of troubleshooting the computer.
37. The student will be able to distinguish systemic methods of troubleshooting the computer.
38. The student will be able to explain the use of flow charts in troubleshooting.
39. The student will be able to use a flow chart in troubleshooting the different systems of the computer.

ASSESSMENT OF LEARNER OUTCOMES:
Student progress is evaluated by means that include, but are not limited to, exams, written assignments, labs, 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 at 913-288-7670.