SYLLABUS

DATE OF LAST REVIEW: 02/2013

CIP CODE: 47.0104

SEMESTER: Departmental Syllabus

COURSE TITLE: Installing and Maintaining Hardware in Linux for Server+

COURSE NUMBER: CRTE0218

CREDIT HOURS: 2

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): CRTE0217 Advanced NOS Administration for Server+

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

COURSE DESCRIPTION: This course covers how to manually configure new hardware with the various hardware that is used on a Linux system. This course also covers special installations and tweaks that will need to be done when installing Linux on a laptop or mobile device.

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. Hardware Terms, Concepts, and Components
   A. Overview of hardware components
   B. Central Processing Unit (CPU)
   C. Video hardware
   D. Miscellaneous hardware and components
   E. Hardware monitoring devices

II. Hardware Installation, Configuration, and Maintenance
   A. Locating hardware drivers for Linux
   B. Configuring hardware in a Linux system
   C. Linux Kernel Modules

III. Checking and Confirming Hardware Configuration
   A. Power cables
   B. IRQ, DMA, and I/O settings
   C. EIDE devices
   D. SCSI devices
   E. BIOS settings
   F. Diagnosing and troubleshooting devices
   G. Peripheral devices
   H. Core system hardware

IV. Laptop and Mobile Devices
   A. Power management
   B. PC card devices

EXPECTED LEARNER OUTCOMES:

A. The student will be able to describe Hardware Terms, Concepts, and Components.
B. The student will be able to describe Hardware Installation, Configuration and Maintenance.
C. The student will be able to describe Checking and Confirming Hardware Configuration.
D. The student will be able to describe Laptops and Mobile Devices.

COURSE COMPETENCIES:
Upon successful completion of this course:

The student will be able to describe Hardware Terms, Concepts, and Components.

1. The student will be able to describe basic hardware components.
2. The student will be able to describe the Central Processing Unit (CPU).
3. The student will be able to describe video Hardware.
4. The student will be able to describe miscellaneous hardware and components.

The student will be able to describe Hardware Installation, Configuration and Maintenance.
5. The student will be able to demonstrate the ability to locate a hardware driver for linux.

6. The student will be able to demonstrate the ability to configure hardware in a linux system.

7. The student will be able to describe Linux kernel modules.

8. The student will be able to describe power cables.

9. The student will be able to describe IRQ, DMA, and I/O settings.

10. The student will be able to describe EIDE devices.

11. The student will be able to describe BIOS settings.

12. The student will be able to demonstrate the ability to diagnose and troubleshoot devices.

13. The student will be able to describe peripheral devices.

14. The student will be able to describe core system hardware.

15. The student will be able to describe power management.

16. The student will be able to describe pc card devices.

**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.