SYLLABUS

DATE OF LAST REVIEW: 02/2013

CIP CODE: 47.0104

SEMESTER: Departmental Syllabus

COURSE TITLE: Physical Components of a Network for Server+

COURSE NUMBER: CRTE0206

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): CRTE0205 Introduction to Networking 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: In this course, the student will study the fundamentals of the network. The choices that are made when a computer network is designed determine how well the system works. This course discusses how the physical and logical topology combined with the network media and devices allow all the computers connected to the system to communicate with each other and the Internet.

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. Configuring a Network Interface Card
   A. What is a NIC?
   B. Setting the IP address
   C. DHCP servers
   D. Domain Name System
   E. Default Gateway

II. Topologies
   A. The network topology
   B. Physical versus logical topology
   C. Identifying Network Topologies

III. Media Types
   A. Network media
   B. Twisted-pair cable
   C. Fiber-optic cable
   D. Wireless

IV. Devices
   A. Hubs and repeaters
   B. Bridges and switches
   C. Routers

EXPECTED LEARNER OUTCOMES:

A. The student will be able to describe how to Configure Network Interface Cards.
B. The student will be able to describe topologies.
C. The student will be able to describe Media Types.
D. The student will be able to describe Network Devices.

COURSE COMPETENCIES:
Upon successful completion of this course:

The student will be able to describe how to Configure Network Interface Cards.
1. The student will be able to describe a Network Interface Card.
2. The student will be able to demonstrate setting the IP address on a NIC.
3. The student will be able to describe DHCP services.
4. The student will be able to explain DNS.
5. The Student will be able to describe a Default Gateway.

6. The student will be able to describe Network Topologies.
7. The student will be able to differentiate between Physical and Logical Topologies.
8. The student will be able to compare and contrast different Network Topologies.

9. The student will be able to describe Media Types.
10. The student will be able to describe Network Media.
11. The student will be able to describe Twisted Pair Cable.
12. The student will be able to describe Fiber Optic Cable.
13. The student will be able to describe Wireless Media.

13. The student will be able to describe Network Devices.
14. The student will be able to describe Hubs and Repeaters.
15. The student will be able to describe Bridges and Switches.
16. The student will be able to describe Routers.

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.