

TECH PREP ARTICULATION AGREEMENT FORM

Date Approved: _____



Agreement Valid for the Following Academic Year 2009-2010		Articulation Agreement (please circle one)		
		New	Revise	Renew
RIO HONDO COLLEGE				
Department: Business		Division: Career & Technical Education /Business		
Course Number CIT 211	Course Title/Units Internetworks and Router Fundamentals, 3 units			
College Pre-requisites: Prerequisite: CIT 210				
HIGH SCHOOL/ROP/ADULT SCHOOL COURSE INFORMATION				
High School/ROP Center/Adult School		District		
Course Number	Course Title/Credits or Hours			

RIO HONDO COURSE INFORMATION	
Course Description :	
<p>This course covers wide area internetworking fundamentals. Topics cover router fundamentals, router setup and configuration, network management, routing and routed protocols, and network troubleshooting. This is the second course in a four course sequence that qualifies the student to take the CISCO CCNA certification test.</p> <p>This course is designed for those students who are interested in wide area internetworking fundamentals and those students who desire to qualify to take the CISCO CCNA certification test.</p>	
Required Course Content for Articulation:	
<p>A. Review</p> <ol style="list-style-type: none"> 1. The OSI Model 2. LAN's 3. Understand the Basics of TCP/IP Addressing 4. Understand the Host Layers (the Upper 4 layers of the OSI Model) <p>B. Routers</p> <ol style="list-style-type: none"> 1. Basic Information about Routers and their Use in Networks 2. Understand WAN's <p>C. Using the Router</p> <ol style="list-style-type: none"> 1. Understand the Basics of Router's Command Line Interface 2. Demonstrate How to Log into the Router 3. Demonstrate How to Enter Router Modes 4. Discern Different Router Modes and Commands <p>D. Router Components</p> <ol style="list-style-type: none"> 1. Understand Router Components 2. Router Show Commands 3. Router's Network Neighbors 4. Understand Basic Network Testing Commands 5. Demonstrate Competence with Commands <p>E. Router Startup and Setup</p>	

1. Understand the Router Boot Sequence and Setup Mode
 2. Demonstrate Ability to Configure a Router from Setup Mode
 3. Demonstrate Ability to Configure a Router from Setup Mode - Challenge Lab
- F. Router Configuration
1. Understand Where Router Configuration Files are Located
 2. Understand Router Configuration
 3. Demonstrate Basic Router Configuration Skills
- G. IOS
1. Understand The Basics of IOS Versions
 2. Use and Interpret the Show Version Command
 3. Load IOS Images
 4. Load IOS Image from a TFTP Server
 5. Loading a New IOS Image
- H. TCP/IP
1. Understand the Basics of Layer 4
 2. Understand Some Important Layer 3 concepts
 3. The TCP/IP Protocol Suite
- I. IP Addressing
1. IP Addressing and Subnetting
 2. The Role of DNS in Router Configurations
 3. Assigning New Subnet Numbers to Semester 2 Topology
- J. Routing
1. Understanding the Basics of Routing
 2. Why Routing Protocols are Necessary
 3. Basics of Distance-Vector Routing
- K. Routing Protocols
1. Static Routing and Default Routes
 2. Interior and Exterior Routing Protocols
 3. Understanding RIP
- L. Network Troubleshooting
1. Troubleshooting a 5-router Network
 2. Network Troubleshooting Strategies

Competencies and Skill Requirements for Articulation (Use additional pages as necessary.)

At the conclusion of the course, the student should be able to:

- Compare and critique information about the OSI model.
- Be able to use browsers and adjust proper settings to access the Cisco curriculum through the Internet and local network.
- Compare and contrast the unique capabilities of the OSI model and the TCPIIP model.
- Evaluate and compare how the seven layers within the OSI models enable successful data transference on a network.
- Create and develop troubleshooting techniques to locate and correct network problems.
- Analyze and project using the tools available for various levels of analyzing problems in a network.

- Compare and contrast the process of loading configuration files from different sources; their strengths and limitations.

Measurement Methods: (certification, licensure, exams, etc.)

- Group evaluation of individuals' contributions to the projects.
- Assess individual Web search strategy to answer research questions.
- Appraise the timeliness, accuracy, appearance and content of group and individual assignments.
- Measure the understanding of nomenclature through on-line exams, tests and quizzes.
- Rate student routing capabilities and their understanding of options and goals when troubleshooting.
- Appraise Engineering journal for content and retrospective commentary and rationale for improvement.

Textbooks or Support Materials (including software):

1. Lewis, Chris, Cisco TCP/IP Routing Professional Reference, McGraw-Hill, 1998.
2. Hudson, Kurt; Cannon, Kelly; CCNA Guide to Cisco Networking Fundamentals, Course Technology, 2000.
3. Cannon, Kelly; CCNA Guide to Cisco Networking Fundamentals Lab Manual, Course Technology, 2000.
4. Network Academy Second Semester Cisco CAI Program by Cisco Systems, 2000.

Please attach request for articulation form and all reviewed course materials (e.g., outlines, syllabi, exams) with this form

II. AGREEMENT TYPE (To be filled out by RHC faculty)	YES	NO	
Approval for Credit by Examination (for college credit)	<input type="checkbox"/>	<input type="checkbox"/>	
Is a test required at RHC to obtain credit?	<input type="checkbox"/>	<input type="checkbox"/>	
Grade requirement to obtain credit (please circle)	A	B	C
Approval for Advanced Placement <i>(Only if course is not approved for Credit by Examination)</i>	<input type="checkbox"/>	<input type="checkbox"/>	
Grade Requirement to meet Advanced Placement	A	B	C

Based on a Statewide Career Pathways Project articulation template:

APPROVAL OF ARTICULATION AGREEMENT			
Printed Name	Signature	Institution	Date