

MASTER COURSE OUTLINE

A. CPRO 2020 Virtualization Technology Fundamentals

B. COURSE DESCRIPTION:

This course provides the skills and knowledge necessary to implement and administer server and desktop virtualization. This course is for information technology (IT) professionals who support, administer, or implement server virtualization systems.

This course prepares students for industry standard Microsoft and VMware virtualization certifications. Prerequisites: CPRO 1016.

(3 Cr – 3 lect, 0 lab)

C. **Core Theme: Critical Thinking

D. MAJOR CONTENT AREAS:

- History of virtualization
- Virtualization architecture
- Virtual machine manager
- VMware workstation
- VMware server
- Microsoft virtual PC
- Microsoft virtual server
- Microsoft Hyper-V
- Virtual networks
- Virtual storage
- Virtual security
- Virtual disaster recover
- Virtual high availability

E. GOAL TYPES, OBJECTIVES, AND OUTCOMES:

<u>GOAL</u>	<u>OBJECTIVES</u> Students will be able to	<u>OUTCOMES</u> The student will successfully
** <u>Critical Thinking</u>	imagine and seek out a variety of possible goals, assumptions, interpretations, or perspectives which can give alternative meanings or solutions to given situations or problems.	1. analyze different virtualization products and select the appropriate mix of technologies based upon a specific set of given business requirements.
CS	define and contrast the different virtualization technologies attributes,	1. demonstrate an understanding of virtualization deployment

	features, services, benefits, and limitations.	and management.
<u>CS</u>	implement and manage virtualization products.	1. install, configure, and manage virtual servers.
<u>CS</u>	implement and manage virtual storage.	1. install, configure, and manage virtual storage.
<u>CS</u>	implement and manage virtual networks.	1. install, configure, and manage virtual networks.
<u>CS</u>	communicate with end users by formulating questions and providing answers that are appropriate to the end users' level of technological literacy.	1. guide a classmate through the resolution of a virtual server access problem using verbal communication in a simulated helpdesk scenario.
<u>CS</u>	demonstrate proper troubleshooting methodologies and techniques.	1. resolve a virtual server misconfiguration lab scenario using the command (CMD) line and graphical user interface (GIU) to monitor and troubleshoot the problem.

F. SPECIAL INFORMATION:

This course may require use of the Internet, the submission of electronically prepared documents and the use of a course management software program. Students who have a disability and need accommodations should contact the instructor or the Student Success Center at the beginning of the semester. This information will be made available in alternative format, such as Braille, large print, or current media, upon request.

G. COURSE CODING INFORMATION:

Course Code T/Class Maximum 30; Letter Grade

Revision date: 12/08/10

AASC Approval date: 12/21/10

*Riverland Community College Disciplines	MnTC Goal Number
Communication (CM)	1
Natural Sciences (NS)	3
Mathematics/Logical Reasoning (MA)	4
History and the Social & Behavioral Sciences (SS)	5
Humanities and Fine Arts (HU)	6

**Riverland Community College Core Themes	MnTC Goal Number
Critical Thinking (CT)	2
Human Diversity (HD)	7
Global Perspective (GP)	8
Ethical and Civic Responsibility (EC)	9
People and the Environment (PE)	10

*These five MnTC Goals have been identified as Riverland Community College Disciplines.

** These five MnTC Goals have been identified as Riverland Community College Core Themes.

NOTE: The Minnesota Transfer Curriculum “10 Goal Areas of Emphasis” are reflected in the five required discipline areas and five core themes noted in the Riverland Community College program of study guide and/or college catalog.

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